TEXAS OIL & GAS CORP.
1800 LINCOLN CENTER BUILDING
DENVER, COLORADO 80264

TELEPHONE (303) 861-4246

June 18, 1980

Ms. Bonnie Melendez
Utah Division of Oil, Gas & Mining
1588 West, North Temple
Salt Lake City, Utah 84116

Re: Application for Permit to Drill
Grynberg Federal #1
Section 28-T16S-R25E
Grand County, Utah

Dear Ms. Melendez:

Please find enclosed an APD, 10-point plan, BOP schematic and location plat for the well referenced above.

We request permission to proceed with drilling of this well.

If you should have any questions, please contact me. Thank you.

Very truly yours,

TEXAS OIL & GAS CORP.

Scott McGlochlin
Safety & Environmental
Administrator

SM/ck

Form 9-331 C
(May 1963)

SUBMIT IN [redacted]PLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Nationwide Bond No. 199-32-08

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
Texas Oil & Gas Corp.

3. ADDRESS OF OPERATOR
1800 Lincoln Center Building, Denver, CO 80264

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
1813' FSL, 1412' FWL, Section 28-T16S-R25E NE SW
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.
U-13653

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
---

7. UNIT AGREEMENT NAME
---

8. FARM OR LEASE NAME
Grynberg Federal

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Undesignated ~~San Arroyo Field~~

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 28-T16S-R25E

12. COUNTY OR PARISH: Grand
13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
20 miles NW of Mack, Colorado

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 827'

16. NO. OF ACRES IN LEASE: 280

17. NO. OF ACRES ASSIGNED TO THIS WELL: 320' Standup

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: ----

19. PROPOSED DEPTH: 5965' Morrison

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 7020' GR

22. APPROX. DATE WORK WILL START*: July 15, 1980

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36# New	[redacted] 250'	Cement to Surface
7 7/8"	4 1/2"	10.5# New	250' - TD	Cement top at 5200'

If water is encountered in the Castlegate (2055'), 7" casing will be set with 150 sacks of cement and a 6 1/4" hole drilled to TD.

APPROVED BY THE DIVISION
OF OIL, GAS, AND MINING
DATE: 6-19-80
BY: M. J. Minder

RECEIVED
JUN 19 1980
DIVISION OF
OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED R. A. Varela TITLE Drilling & Production Manager DATE March 28, 1980

(This space for Federal or State office use)

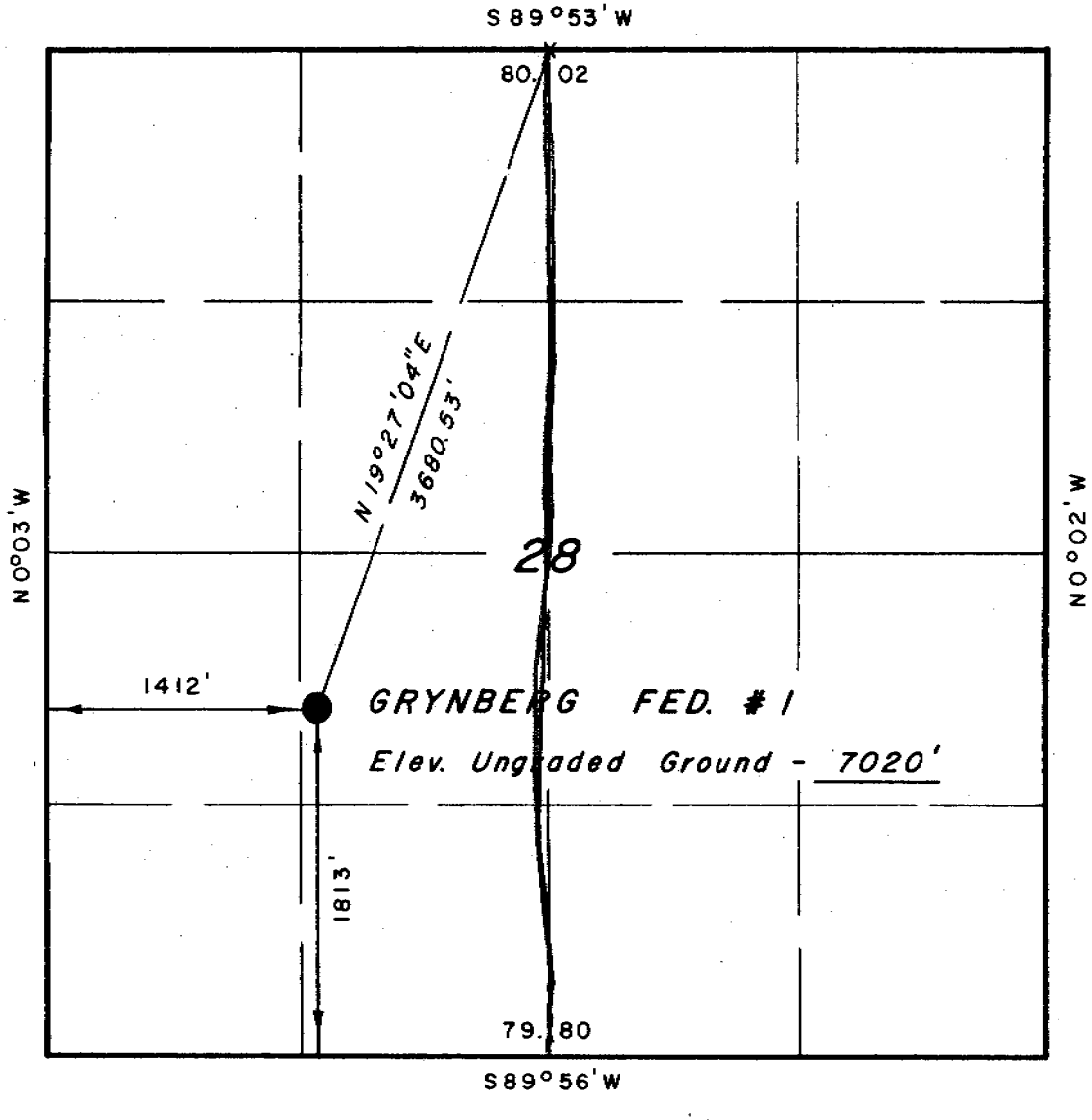
PERMIT NO. 43-019-30657 APPROVAL DATE 6/19/80

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

T 16 S, R 25 E, S.L.B.&M.



X = Section Corners Located

PROJECT

TEXAS OIL & GAS CORP.

Well location, *GRYNBERG FED. # 1*, located as shown in the NE 1/4 SW 1/4 Section 28, T16S, R25E, S.L.B.&M. Grand County, Utah.

NOTE:

Basis of Bearings is from Solar Observations.

Exhibit 2

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION Nº 3154
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P O. BOX Q — 110 EAST - FIRST SOUTH
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 3 / 17 / 80
PARTY M.S. K.H. S.B.	REFERENCES GLO Plat
WEATHER Cold	FILE TEXAS OIL & GAS

9-331-C ADDENDUM

Grynberg Federal #1
Section 28-T16S-R25E
Grand County, Utah

1. SURFACE FORMATION: Mesa Verde

2. ESTIMATED FORMATION TOPS:

Buck Tongue of Mancos	1725'
Castlegate Sandstone	2055'
Mancos	2180'
Dakota Silt	5505'
Dakota	5565'
Fourth San Arroyo Sandstone	5656'
Fifth San Arroyo Sandstone	5690'
Buckhorn Sandstone	5725'
Morrison (Brushy Basin Member)	5765'
T.D.	5965'

3. ESTIMATED DEPTH AT WHICH OIL, GAS, WATER OR OTHER MINERAL BEARING ZONES ARE EXPECTED TO BE ENCOUNTERED:

Expected water zones:	
Castlegate Sandstone	2055'
Expected gas zones:	
Fourth San Arroyo Sandstone	5656'
Fifth San Arroyo Sandstone	5690'
Buckhorn Sandstone	5725'
Morrison (Brushy Basin Member)	5765'

4. CASING PROGRAM AS PER FORM 9-331 C.

5. PRESSURE CONTROL EQUIPMENT:

A. After surface casing is set, a double ram-type blowout preventer with blind rams and pipe rams, with minimum working pressure of 2000 psi (greater than the anticipated bottomhole pressure of 1100 psi) will be installed.

B. A choke control, fill and kill lines with minimum working pressure of 2000 psi will be installed.

C. A rotating pack-off head will be installed above the blowout preventer to control flow while drilling with air.

D. The equipment in A and B will be pressure-tested to 2000 psi before drilling surface pipe cement, and the blowout preventer will be tested for operations daily and during trips.

6. MUD PROGRAM:

0'	-	250'	Spud mud
250'	-	5965'	Air or air mist

7. AUXILIARY EQUIPMENT:

   A. A kelly cock will be used.

   B. A float valve will be run in the drill string above the bit.

   C. A sub with full opening valve will be kept on the derrick floor to stab into DP when kelly is not in use.

8. CORING, LOGGING, TESTING PROGRAM:

   A. No coring is anticipated.

   B. GR induction.
   SNP-FDC-GR with caliper.

9. ABNORMAL CONDITIONS:

   A. No abnormal pressures or temperatures are expected.

   B. No hazardous gases such as H2S are expected.

   C. While drilling with gas or air, return fluids will be directed through the blow line to the reserve pit, located 125' from the wellhead. All open fires or ignition sources will be prohibited on location while gas or air drilling. A pilot flame will be maintained at the end of the blow line to insure burning of return gases that are combustible.

10. ANTICIPATED STARTING DATE:

Start location	July 15, 1980
Spud	August 1, 1980
Complete drilling	August 15, 1980
Completed, ready for pipeline	September 30, 1980

11. Productive zones will be perforated, tested and treated as necessary. Gas will be flared during testing. Produced water will be contained in the unlined drilling reserve pit. The extent of treatment of a zone (acidizing and/or fracing) can only be determined after the zone has been tested. A completion program will be furnished after drilling and logging.

** FILE NOTATIONS **

DATE: June 19, 1980

OPERATOR: Texas Oil & Gas Corporation

WELL NO: Thynberg Federal #1

Location: Sec. 28 T. 16S R. 25E County: Grand

File Prepared: ☑ Entered on N.I.D: ☑

Card Indexed: ☑ Completion Sheet: ☑

API Number 43-019-30657

CHECKED BY:

Petroleum Engineer: M. J. Minder 6-19-80

Director:

Administrative Aide: OK per spacing order

APPROVAL LETTER:

Bond Required: ☐ Survey Plat Required: ☐

Order No. ~~149-1~~ ~~3/14/73~~ 149-3 5/28/80 O.K. Rule C-3 ☐

#3 standup

Rule C-3(c), Topographic Exception - company owns or controls acreage within a 660' radius of proposed site

Lease Designation Fed Plotted on Map ☑

Approval Letter Written ☑ ltr

Hot Line ☑ P.I. ☑

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DUPLICATE

Nationwide Bond No. 199-32-08

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b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

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3. ADDRESS OF OPERATOR: 1800 Lincoln Center Building, Denver, CO 80264

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1813' FSL, 1412' FWL, Section 28-T16S-R25E
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.: U-13653

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ———

7. UNIT AGREEMENT NAME: ———

8. FARM OR LEASE NAME: Grynberg Federal

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: San Arroyo Field

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12. COUNTY OR PARISH: Grand

13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 20 miles NW of Mack, Colorado

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SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
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If water is encountered in the Castlegate (2055'), 7" casing will be set with 150 sacks of cement and a 6 1/4" hole drilled to TD.

State of Utah, Department of Natural Resources
Division of Oil, Gas, and Mining
1588 West North Temple
Salt Lake City, Utah 84116

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED L. A. Varela TITLE Drilling & Production Manager DATE March 28, 1980

(This space for Federal or State office use)

PERMIT NO. ———— APPROVAL DATE ————

APPROVED BY W P Martens FOR E. W. GUYNN DISTRICT ENGINEER DATE JUL 08 1980

CONDITIONS OF APPROVAL, IF ANY: TITLE ————

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED
TO OPERATOR'S COPY
*See Instructions On Reverse Side

G OR VENTING OF
GAS IS SUBJECT TO NTL 4-A
DATED 1/1/80

Utah O + G

Oil and Gas Drilling

EA No. 346-80

United States Department of the Interior
Geological Survey
2000 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104

USUAL ENVIRONMENTAL ASSESSMENT

Date June 24, 1980

Operator Texas Oil & Gas Corp. Well No. Grynberg Fed. #1

Location 1813' FSL 1412' FWL Section 28 Township 16S Range 25E

County Grand State Utah Field/Unit San Arroyo

Lease No. U-13653 Permit No.

Prepared by: Greg Darlington
Environmental Scientist
Grand Junction, Colorado

Joint Field Inspection Date: May 21, 1980

Field Inspection Participants, Titles, and Organizations:

Greg Darlington	U. S. Geological Survey - Vernal
Elmer Duncan	Bureau of Land Management - Moab
Scott McGlochlin	Texas Oil & Gas Corp.
Floyd Murray	D. E. Casada Construction

Related Environmental Documents:

Unit Resource Analysis, Book Mountain Planning Unit (06-01), Bureau of Land Management, Moab.

DESCRIPTION OF PROPOSED ACTION

Proposed Action:

1. Location State: Utah
   County: Grand

   1813 ' F S L, 1412 ' F W L, NE ¼ SW ¼

   Section 28, T16S, R25E, SLM

2. Surface Ownership Location: Public
   Access Road: Public

Status of Reclamation Agreements: Rehabilitation plan judged as adequate. Problems hampering restoration: a) Area subject to short growing season and b) limited precipitation during growing season.

3. Dates APD Filed: April 2, 1980
   APD Technically Complete: April 16, 1980
   APD Administratively Complete: July 8, 1980

4. Project Time Frame Starting Date: July 15, 1980
   Duration of drilling activities: 30 days.

A period of 30 to 60 days is normally necessary to complete a well for production if hydrocarbons are discovered. If a dry hole is drilled, recontouring and reseeding would normally occur within one year; revegetation or restoration may take several years. If the well is a producer, an indefinite period of time would occur between completion and rehabilitation.

5. Related actions of other federal or state agencies and Indian tribes:

   None known

6. Nearby pending actions which may affect or be affected by the proposed action:

   None known

7. Status of variance requests:

   None known

The following elements of the proposed action would/could result in environmental impacts:

1. A drill pad 155' wide x 325' long and a reserve pit 20' x 100' would be constructed. Approximately 1.0 mile of new access road, averaging 18' in width, would be constructed and approximately 1.5 miles of planned road existing trail would be improved to 18' wide from a maintained road. Four acres of disturbed surface would be associated with the project. Maximum disturbed width of access road would be limited to 30'.

The reserve pit would be about 20' x 100' and the blooie pit 20' x75'. About .7 mile of new access road to the Nicor Federal #1 well will also be used for this well. Since the Nicor Federal #1 well is planned to be drilled first, this is included in the existing road to be improved or reconstructed. About .8 mile of existing trail is also involved. At least .6 of an acre will be required for backsloping along the access road in addition to the 18' driving surface. Hence, about 4.0 acres of disturbed surface would be associated with the new construction for this project.

2. Drilling would be to a proposed depth of 5965'.

3. Waste disposal

4. Traffic - The construction of the access road will require many culverts or low water crossings. Road construction will be relatively expensive for this location because of the terrain involved.

5. Water Requirements

6. Completion

7. Production

8. Transportation of hydrocarbons

Details of the proposed action are described in the Application for Permit to Drill.

The access road was changed per the attached map to reduce grade and follow the route which had been staked.

Environmental Considerations of the Proposed Action:

Regional Setting/Topography - The location is on San Arroyo Ridge which is fairly flat and narrow. The area is densely forested and the access road maintains grade quite well through a rugged, steep, forested hillside.

PARAMETER

A. Geology

1. Other Local Mineral Resources to be Protected: Coal may be present from the surface to a depth of about 1725'.

Information Source: Mineral Evaluation Report.

2. Hazards:

a. Land Stability: Location and access built on Mesaverde Formation. Material is stable, provided the slopes are moderate and moisture content is low. Steep slopes of the sidehills on which part of the

road is located should be sufficiently stable if suitable backsloping of the cut and fill involved in road construction is done.

Information Source: Field observation and Application to Drill.

b. Subsidence: Subsidence can occur with the withdrawal of oil, gas, and/or water.

Information Source: Keller, Edward A., 1976, Environmental geology, Charles E. Merrill, 488 pp.

c. Seismicity: The location is in an area of moderate seismic risk.

Information Source: RMAG, 1972, Geologic Atlas of the Rocky Mountain Region, "Earthquakes of Record and Interpreted Seismicity 1852-1969."

d. High Pressure Zones/Blowout Prevention: No high pressure zones expected. Blowout prevention systems detailed in APD.

Information Source: Application to Drill.

B. Soils

1. Soil Character: No detailed soil surveys done in area. Changes in soil fertility, horizons, slope stability, etc., may be unpredictable. The location has sandy soil with mixed shale and sandstone gravels.

Information Source: G. Darlington, Environmental Scientist, USGS.

2. Erosion/Sedimentation: Erosion/sedimentation would increase as would runoff potential. Extent of increases unpredictable without site-specific studies being done.

Information Source: Field observation.

C. Air Quality - Wellsite lies in Class II attainment area. No Class I attainment areas are near, or adjacent to, proposed location.

Information Source: Field observation.

D. Noise Levels - Ambient noise levels temporarily elevated. Personnel safety could be jeopardized. Wildlife would avoid area.

Information Source: Field observation.

E. Water Resources

1. Hydrologic Character

a. Surface Waters: Drainage is west into San Arroyo Canyon, then to Bitter Creek and to the Colorado River.

Information Source: Application to Drill Maps.

b. Groundwaters: Fresh water is possible in the Castlegate sandstones.

Information Source: Mineral Evaluation Report.

2. Water Quality

a. Surface Waters: Drainages in the area are nonperennial. Proper construction of the location as outlined in the APD layout diagram should tend to minimize any hazards to surface water quality.

Information Source: Field observation.

b. Groundwaters: Operator proposes 250' of surface casing. Commingling of drilling fluids with potentially usable water could render groundwater unusable. Pits would be unlined.

Information Source: Field observation.

F. Flora and Fauna

1. Endangered and Threatened Species Determination

Based on the comments received from the Moab District Bureau of Land Management on June 12, 1980, we determine that there would be no effect on endangered and threatened species and/or their critical habitat.

2. Flora: Vegetation consists of pinon pine, other pines, sagebrush, cactus, various mountain bushes, scrub oaks, and native grasses.

Information Source: Field observation.

3. Fauna: Mule deer, coyotes, bear, squirrels, various birds, and other fauna typical of a mountainous forested area.

Information Source: BLM-Moab, Book Mountain Unit Resource Analysis.

G. Land Uses

1. General: Wildlife habitat, gas well development, and hunting are the chief land uses.

Information Source: Field observation.

2. Affected Floodplains and/or Wetlands: None

Information Source: Field observation.

3. Roadless/Wilderness Area: The area is not in a roadless/wilderness designated area.

H. Aesthetics: Operation would not blend with natural surroundings. Most likely unappealing to recreationists. Impact duration: life of well. The area would be made increasingly accessible for further development and recreational uses.

Information Source: Field observation.

I. Socioeconomics: The effect of one well on local and regional population and economy would be considered minor. If major discovery, then consider: Population increase, community services taxed, resources depleted, cumulative impacts multiply, pipelines and transportation routes expand.

Information Source: G. Darlington, Environmental Scientist, USGS.

J. Cultural Resources Determination: Based on the comments received from the Moab District Bureau of Land Management on June 12, 1980, we determine that there would be no effect on cultural resources subject to their statement "the archeological requirement has been fulfilled on this location."

Information Source: Bureau of Land Management Stipulations Letter.

K. Adequacy of Restoration Plans: Rehabilitation plan judged as adequate. Problems hampering restoration: a) Area subject to short growing season and b) limited precipitation during growing season.

Information Source: Field observation and BLM Stipulations Letter.

Alternatives to the Proposed Action:

1. Disapproving the proposed action or no action - If the proposed action is denied, no action would occur, the existing environment would remain in its present state, the lessee/operator would not realize any return on investments and the public would be denied a potential energy source.

2. Approving the project with the recommended stipulations - Under federal oil and gas leasing provisions, the Geological Survey has a responsibility to approve mineral development if the environmental consequences are not too severe or irreversible. Permanent damage to the surface and subsurface would be prevented as much as possible under USGS and Surface Management Agency supervision. Environmental impacts would be significantly mitigated.

Adverse Environmental Effects:

1. If approved as proposed:

   a. About 4.0 acres of vegetation would be removed, increasing and accelerating erosion potential.

   b. Pollution of groundwater systems could occur with the introduction of drilling fluids into the aquifer(s). The potential for interaquifer leakage and lost circulation is ever-present, depending on the casing program.

   c. Minor air pollution would be induced on a temporary basis due to exhaust emissions from rig engines and support traffic.

   d. The potential for fires, leaks, spills of gas and oil or water exists.

   e. During construction and drilling phases of the operation, noise and dust levels would increase.

f. Distractions from aesthetics during the lifetime of the project would exist.

g. Erosion from the site would eventually be carried as sediment in the Colorado River. The potential for pollution to Bitter Creek would exist through leaks and spills.

h. If hydrocarbons would be discovered and produced, further development of the area could be expected to occur, which would result in the extraction of an irreplaceable resource, and further negative environmental impacts. These impacts include the cumulative loss of wildlife habitat due to the areas necessary for roads, pipelines, drillsites, and transmission lines. These actions may disrupt wildlife social behavior and force habitat relocation over an extended period of time. In addition, the cumulative effects of non-point erosion become substantial in a developing field, primarily those located near perennial streams where siltation and sedimentation are critical to aquatic life cycles.

2. Conditional approval

a. All adverse impacts described in section one above would occur.

Recommended Approval Conditions:

Drilling should be allowed, provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator:

1. See attached Lease Stipulations.

2. See attached BLM Stipulations.

3. Note the BLM stipulation that the pit be built in solid cut material.

Controversial Issues and Conservation Division Response: None are involved at the present time.

We have considered the proposed action in the preceding pages of this EA and find, based on the analysis of environmental considerations provided therein, no evidence to indicate that it will significantly (40 CFR 1508.27) impact the quality of the human environment.

Determination

I determine that the proposed action (as modified by the recommended approval conditions) does not constitute a major Federal action significantly affecting the quality of the human environment in the sense of NEPA, Section 102(2)(C).

JUN 30 1980

District Engineer
U. S. Geological Survey
Conservation Division
Oil & Gas Operations
Salt Lake City District

Date

Texas Oil + Gas
Grynberg Federal #1
Sec 28, T16S, R25E
5/21

REFERENCES

1 BLM-Moab, Book Mountain Unit Resource Analysis

2 Keller, Edward A., Environmental Geology, 488 pages, 1976, Charles E. Merrill.

3 Utah State Division of Health, Conservation Committee, Utah Air Conservation Regulations, Revised February, 1979, Bureau of National Affairs, Inc.

4 Perkins, David M., Seismic Risk Maps, Reprint-Earthquake Information Bulletin, Nov-Dec 1974, Vol 6, No. 6.

5 von Hake, Carl A., Earthquake History of Utah, NOAA.

6 BLM-Utah, Final Initial Wilderness Inventory, 50 pp, August 1979, USDI.

7 Brown, Merle, Climates of the States - Utah, 15 pp, Climatography of the U.S., No. 60-42, Feb. 1960.

U-13653

STIPULATION

As to lands administered by the Bureau of Land Management under the above oil and gas lease, the lessee hereby agrees that the following stipulations are by this reference incorporated as terms and conditions of said lease:

Before undertaking any exploratory operations involving use of bulldozers, earth-moving, or similar mobile equipment which may result in scarring of public lands, damaging surface resources, or inducing erosion thereon, he or his designee shall submit in writing to the Bureau of Land Management District Manager in the District in which the land is located, advance notice of such operation. Said operations include but are not limited to exploratory drilling, construction of access roads or airstrips, and the conduct of seismic operations.

United States Department of the Interior

IN REPLY REFER TO
3100
(U-603)

BUREAU OF LAND MANAGEMENT
Moab District
Grand Resource Area
P. O. Box M
Moab, Utah 84532

June 10, 1980

Memorandum

To: Oil & Gas Office, USGS Conservation Division,
P.O. Box 1037, Vernal, Utah
From: Area Manager, Grand Acting

Subject: Texas Oil & Gas Corporation
Grynberg Federal #1, Lease U-13653
Section 28, T. 16 S., R. 25 E.
Grand County, Utah

On May 21, 1980, a representative from this office met with Greg Darlington, USGS, and Scott McGlochlin agent of Texas Oil & Gas Corp. for an inspection of the above referenced location. Subject to the attached conditions, I am approving the surface management portion of the Application for Permit to Drill.

The archaeological requirement has been fulfilled on this location. No threatened or endangered flora or fauna are indicated in the area.

Please forward the enclosed information to Texas Oil & Gas Corporation.

David C. Mino

Enclosures (2)
1-Reclamation Procedures
2-Seed Mixture

CONSERVE AMERICA'S ENERGY

Save Energy and You Serve America!

STANDARD STIPULATIONS FOR OIL & GAS EXPLORATION

Contact this office at least 24 hours prior to beginning construction of access road and pad.

Stockpile the surface nine inches of topsoil in a wind-row on the southeast quadrant of the location.

The upper banks (uphill side) of all cuts will be rounded during construction of the access road and pad.

Notify the BLM District Archaeologist if cultural material from subsurface deposits is exposed during the operation.

The trash pit will be at least six feet deep and fenced with fine mesh wire during drilling operations.

The "blooey" line will be centered and directed into the pit.

If production is obtained, the access road will be upgraded to BLM specifications for long-term roads as outlined in the surface use standards section of the "Oil and Gas" pamphlet (joint BLM and USGS publication).

If production is obtained, all production facilities will be painted "desert tan" or a similar color approved by the Grand Resource Area Manager.

Rehabilitation of the site and access road will be accomplished in accordance with the enclosed restoration procedures.

Production facilities and pipeline route are approved on this location under lease rights.

As agreed on during the pre-drill field examination -

The new access road construction from Nicor Fedeal #1 to Grynberg Federal #1, following the flagged line for 0.7 miles. Trees (pinon and juniper) removed during access construction will be windrowed along the east side of the road where terrain permits. Topsoil will be stripped off the access road and windrowed along the east side (uphill) of the road.

Low water crossing(s) will be installed in each drainage channel along the road, and drainages will be kept open for water control.

All cuts will be back sloped, using a 2:1 ratio.

Steel culverts will be installed in the drainages when the road is upgraded.

Access to the drill pad will be in the north east quadrant. Trees (pinon and juniper) that are removed from the location will be stacked on the southeast quadrant of the pad, and immediately behind the topsoil.

The reserve pit dimensions are to be 100 feet long by 20 feet wide by eight feet deep and will be constructed in solid cut material.

1. Disk or rip pads and access roads.

   a. Overlap passes in order to insure complete treatment.

2. Contour pads and access roads.

   a. Lay berms into centers.

   b. Use cut material for fill areas.

   c. Lay stockpiled surface soil over top of pads and spread evenly.

   d. On highly erosive soils, it may be more beneficial to grade slopes to reduce steepness.

   e. Do not smooth pads out, leave a roughened surface. On steeper slopes and slopes with clayey soils scarify or serrate the ground in order to increase water infiltration and reduce erosion.

3. Water bar roads where required by this office.

*	2%	Grade	- 200 ft. intervals
	2-4%	Grade	- 100 ft. intervals
	4-5%	Grade	- 75 ft. intervals
	5%	Grade	- 50 ft. intervals

   * Actual spacing may vary according to soil stability. Lighter textured soils will require more frequent water bars. When natural drainage ways are present, water bars are to be constructed to make maximum use of them. Plan operations so that natural drainage ways do not become blocked.

4. Seed roads and pads in the fall (Oct. through mid-Dec.).

SEED MIXTURE

(Mountain Brush Type)

Grasses		Lbs/Acre
Oryzopsis hymenoides	Indian rice grass	2
Elymus salinus	Wildrye	2
Carex geyeri	Carex (dry land)	1
Stipa comata	Needle & thread (mtn. type)	1
Shrubs		
Lowania mexicana	Cliffrose	2
Purshia tridentata	Bitterbrush	2
Cercocorpus moutauus	Mahogny (mountain)	1
Ephedra vicidiflorus	Mormon tea	1
		12

OM: DISTRICT GEOLOGIST, ME, SALT LAKE CITY, UTAH

: DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

BJECT: APD MINERAL EVALUATION REPORT LEASE NO. U 13653

ERATOR: Texas O&G WELL NO. 1 GRYNBERG FED #1

CATION: NE¼ SW¼ sec. 28, T. 16 S, R. 25 E,

Grand County, Utah

Stratigraphy:

mesaverde	- surface
mancos	- 1725
castlegate	- 2055
mancos	- 2180
Dakota	- 5565
Cedar Mtn	- 5675
morrison	5765
TD	5965

Fresh Water:

possible in Castlegate ss

Leasable Minerals:

coal may be present in mesaverde from surface to 1725'

Additional Logs Needed: if coal is present, run GR-density behind surface casing. Run full proposed program from surface casing to at least top of castlegate, unless intermediate casing is set - then GR density adequate

Potential Geologic Hazards:

References and Remarks:

30 APR RECD

Signature: Date:

28-165-25E
#1

Memorandum

To: District Oil and Gas Engineer, Glenn Mr. Edward Guynn

From: Mining, Supervisor, Mr. Jackson W. Moffitt

Subject: Application for Permit to Drill (form 9-331c) Federal oil and gas lease No. U-31807 Well No 1

1. The location appears potentially valuable for:

   [ ] strip mining*

   [X] underground mining** coal

   [ ] has no known potential.

2. The proposed area is

   [ ] under a Federal lease for _____ under the jurisdiction of this office.

   [X] not under a Federal lease under the jurisdiction of this office.

   [X] Please request the operator to furnish resistivity, density, Gamma-Ray, or other appropriate electric logs covering all formations containing potentially valuable minerals subject to the Mineral Leasing Act of 1920.

*If location has strip mining potential:

Surface casing should be set to at least 50 feet below the lowest strip minable zone at _____ and cemented to surface. Upon abandonment, a 300-foot cement plug should be set immediately below the base of the minable zone.

**If location has underground mining potential:

The minable zones should be isolated with cement from a point 100 feet below the formation to 100 feet above the formation. Water-bearing horizons should be cemented in like manner. Except for salines or water-bearing horizons with potential for mixing aquifers, a depth of 4,000 feet has been deemed the lowest limit for cementing.

Signed Allen J Vance

30 APR RECD

June 20, 1980

Texas Oil and Gas Corporation
1800 Lincoln Center Building
Denver, Colorado 80264

Re: Well No. Grynberg Federal #1
Sec. 28, T. 16S, R. 25E
Grand County, Utah

Insofar as this office is concerned, approval to drill the above referred to gas well is hereby granted in accordance with the Order issued in Cause No. 149-3 dated May 28, 1980. This well is designated as a standup 320.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer
Office: 533-5771
Home: 876-3001

1

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (acquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-019-30657.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder
Petroleum Engineer

/btm

cc: USGS

July 10, 1981

Texas Oil & Gas Corporation
1800 Lincoln Center Building
Denver, Colorado 80264

Re: Well No. Grynberg Federal #1
Sec. 28, T. 16S, R. 25E
Grand County, Utah

Gentlemen:

In reference to above mentioned well, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill this well, please notify this Division. If spudding or any other activity has taken place, please send necessary forms.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

Sandy Bates

Sandy Bates
Clerk-Typist

/lm

TEXAS OIL & GAS CORP.
1800 LINCOLN CENTER BUILDING
DENVER, COLORADO 80264

TELEPHONE (303) 861-4246

August 19, 1981

Utah Division of Oil, Gas, and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Re: Grynberg Federal #1
Section 28-T16S-R25E
Grand County, Utah

Gentlemen:

With reference to your July 10, 1981 letter to us, Texas Oil & Gas Corp. provides the following information regarding our plans for the above-referenced well.

The well location was constructed in the summer of 1980. However, drilling of the well was postponed pending increased geologic control. At this time, we are considering drilling this well in sequence with several other prospects. If drilling is delayed until after our approved federal permit to drill expires (December 31, 1981), a new federal permit would be obtained and updated State APD information submitted to your office. In the event we drill in 1981, Texas Oil & Gas will contact you and file the necessary forms pursuant to the permit requirements.

If you have any additional questions about this well, please contact me at this office.

Very truly yours,

TEXAS OIL & GAS CORP.

Charles K. Curlee

Charles K. Curlee
Environmental Administrator

CKC/BS

Form 9–331
Dec. 1973

Form Approved.
Budget Bureau No. 42–R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
TXO Production Corp.

3. ADDRESS OF OPERATOR
1800 Lincoln Center Building, Denver, CO 80264

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1813' FSL, 1412' FWL, Sec. 28-T16S-R25E
AT TOP PROD. INTERVAL: same
AT TOTAL DEPTH: same

5. LEASE
U-13653

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
---

7. UNIT AGREEMENT NAME
---

8. FARM OR LEASE NAME
Grynberg Federal

9. WELL NO.
#1

10. FIELD OR WILDCAT NAME
San Arroyo

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 28-T16S-R25E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
7020'Gr

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other) Operator Name Change			

(NOTE: Report results of multiple completion or zone change on Form 9–330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Effective September 1, 1981, the exploration and production activities of Texas Oil & Gas Corp. have been reorganized into a new corporate branch, TXO Production Corp. As a consequence, the operator name for this well is changed to "TXO Production Corp.", as indicated above in Item 2.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Charles K. Curlee TITLE Environmental Adm. DATE 9/14/81
Charles K. Curlee

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

January 4, 1982

TXO Production
1800 Lincoln Center Building
Denver, Colorado 80264

Re: See attached

Gentlemen:

In reference to the above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill these wells, please notify this Division. If spudding or any other activity has taken place, please send necessary forms. If you plan to drill this location at a later date, please notify as such.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

Cari Furse

Cari Furse
Clerk Typist

Well No. Arco Fed. B #2
Sec. 6, T. 16S, R. 25E
Grand County, Utah

Well No. Grynberg Federal #1
Sec. 28, T. 16S, R. 25E
Grand County, Utah

Well No. Moxa Federal "A" #1
Sec. 4, T. 16S, R. 26E
Grand County, Utah

Well No. Hougen Federal "A" #1
Sec. 14, T. 17S, R. 24E
Grand County, Utah

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

May 6, 1982

TXO Production Corporation
1800 Lincoln Center Bldg.
Denver, Colorado 80164

Re: See attached

Gentlemen:

In reference to the above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill these wells, please notify this Division. If spudding or any other activity has taken place, please send necessary forms. If we do not hear from your company within fifteen (15) days, we will assume you do not intend to drill these wells, and action will be taken to terminate the application. If you plan to drill this location at a later date, please notify as such.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

Cari Furse

Cari Furse
Clerk Typist

Well No. Arco Federal #B-2
Sec. 6, T. 16S, R. 25E.
Grand County, Utah

Well No. Grynberg Federal #1
Sec. 28, T. 16S, R. 25E.
Grand County, Utah

Well No. Moxa Federal "A" #1
Sec. 4, T. 16S, R. 26E.
Grand County, Utah

Well No. Hougen Federal "A" #1
Sec. 14, T. 17S, R. 24E.
Grand County, Utah

TXO

TXO PRODUCTION CORP.
1800 LINCOLN CENTER BUILDING
DENVER, COLORADO 80264
TELEPHONE (303) 861-4246

May 17, 1982

Utah Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Attention: Cari Furse

Re: Various Wells
Grand & Uintah Counties, Utah

Dear Sir/Madam:

TXO Production Corp. has received your May 6, 1982 letter inquiries concerning the status of various wells locations in Grand and Uintah Counties, Utah. The current status and comments for each well are given below:

Arco Federal "B" #2 Section 6, T16S-R25E Grand County, Utah	Well deferred; cancel permit
Asphalt Creek Federal #2 Section 10-T12S-R24E Uintah County, Utah	Well to be drilled in late 1982 or early 1983; reserve permit
Baumgartner Federal #1 Section 25-T16S-R24E Grand County, Utah	Well to be drilled in fall 1982; reserve permit
Duncan Federal #3 Section 28-T15S-R23E Uintah County, Utah	Well to be moved; cancel permit; will submit new APD for new location
Duncan Federal #4 Section 33-T15S-R23E Uintah County, Utah	Well to be moved; cancel permit; will submit new APD for new location
Grynberg Federal #1 Section 28-T16S-R25E Grand County, Utah	Well to be drilled in fall 1982 or spring 1983; reserve permit
Hancock Federal #1-X Section 5-T17S-R25E Grand County, Utah	Well drilled April-May 1981; Form OGC-8-X submitted May 26, 1981; Completion Report will be submitted under separate cover.

Hougen Federal "A" #1 Section 14-T17S-R24E Grand County, Utah	Well to be drilled late 1982 or early 1983; reserve permit
Lauck Federal #1 Section 29-T16S-R25E Grand County, Utah	Well to be moved; cancel permit; will submit new APD for new location
Lauck Federal #2 Section 29-T16S-R25E Grand County, Utah	Well may be moved; reserve permit for current location
Moxa Federal "A" #1 Section 4-T16S-R26E Grand County, Utah	Well drilled May-June 1981; water sands and Completion Report will be submitted under separte cover
Wall Federal #1 Section 30-T16S-R25E Grand County, Utah	Well to be drilled late 1982 or early 1983; reserve permit
Winter Ridge Federal #1 Section 33-T15S-R22E Uintah County, Utah	Well will not be drilled; cancel permit

The drilling schedule for wells that will be drilled is tentative and subject to change. Nonetheless, the permits should be retained as valid. Completion and water sands reports for wells drilled in 1981 are forthcoming. I trust that our drilling and reporting delays have not inconvenienced your office.

Very truly yours,

TXO PRODUCTION CORP.

Charles K. Curlee

Charles K. Curlee
Environmental Administrator

CKC/BS

TXO

TXO PRODUCTION CORP.
1800 LINCOLN CENTER BUILDING
DENVER, COLORADO 80264

TELEPHONE (303) 861-4246

October 4, 1982

Mr. Norm Stout
State of Utah
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Grynberg Federal #1
Section 28-T16S-R25E
Grand County, Utah

Dear Mr. Stout:

Enclosed please find one copy of the APD/MSUOP for the above-referenced well. Please note that this is a directional drill proposal and that the footages at the proposed production zone are 800' FSL and 1750' FWL with a 300' target radius.

TXO Production Corp. requests an administrative spacing exception for this prospect, pursuant to spacing order 149-3. The decision to locate this well where it is was based on both topographic and geologic considerations. (See Exhibit 4 of the MSUOP.)

TXO anticipates spudding this well on or about October 14, 1982. Consequently, we request an expeditious review of this application. If you have any questions, please contact me at this office.

Very truly yours,

TXO PRODUCTION CORP.

Paul Urban
BS

Paul Urban
Environmental Scientist

PU/BS
Enclosure/as stated

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
OCT 07 1982
DIVISION OF OIL, GAS & MINING

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: U-13653

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: -

7. UNIT AGREEMENT NAME: -

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [X]

8. FARM OR LEASE NAME: Grynberg Federal

2. NAME OF OPERATOR: TXO Production Corp. Attn: Paul Urban

9. WELL NO.: #1

3. ADDRESS OF OPERATOR: 1800 Lincoln Center Building, Denver, CO 80264

10. FIELD AND POOL, OR WILDCAT: San Arroyo

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1813' FSL, 1412' FWL, Section 28-T16S-R25E
At proposed prod. zone: Dakota Sands: 800' FSL, 1750' FWL NESW
Total Depth: 708' FSL, 1781' FWL, Section 28

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 28-T16S-R25E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 24 miles northwest of Mack, Colorado

12. COUNTY OR PARISH: Grand — 13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
800'	280	320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	19. PROPOSED DEPTH	20. ROTARY OR CABLE TOOLS
- - -	5968' MD 5800' TVD MORRISON	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 7020' GR

22. APPROX. DATE WORK WILL START*: October 20, 1982

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
24"	16"	Conductor	40'	2 yards
12 1/4"	9 5/8"	36#	300'	160 sacks
8 3/4"	7"	20#	2377' MD 2350' TVD	200 sacks
6 1/4"	4 1/2"	10.5#	5968' MD 5800' TVD	150 sacks

TXO Production Corp. proposes to directionally drill the subject well using an angle building rate of 2°/100' in accordance with the following table:

	TVD	Deviation	Angle	MD
Kickoff Depth	1000'	0.0'	0.0	1000'
Angle Established	1725'	93.0	14.7°	1731'
Initial Objective	5428'	1068.0'	14.7°	5583'
Total Depth	5800'	1165.0'	14.7°	5968'

The initial target (Dakota Sands) is located 800' FSL and 1750' FWL of Section 28 and is planned with a 300' target radius to comply with applicable State spacing regulations.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED R. Bruce Wright for R.E. Dashner TITLE Dist. Drilling Engineer DATE October 6, 1982
Ronald E. Dashner

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 10/8/82
BY: [signature]

9-331 C ADDENDUM
Grynberg Federal #1
Section 28-T16S-R25E
Grand County, Utah

1. SURFACE FORMATION: Mesaverde

2. ESTIMATED FORMATION TOPS:

Castlegate	1935'
Mancos	2150'
Dakota Silt	5450'
Morrison	5700'
Total Depth	5800'

Depths given are true vertical depths (TVD)

3. ESTIMATED DEPTH AT WHICH OIL, GAS, WATER OR OTHER MINERAL BEARING ZONES ARE EXPECTED TO BE ENCOUNTERED:

Expected Gas Zone: Dakota 5450' (TVD)

Water may be encountered in the Mesaverde and Castlegate formations.

4. DIRECTIONAL DRILL PROGRAM:

As indicated on Form 9-331C, TXO Production Corp. proposes to directionally drill the subject well. Major depths and angles are listed below:

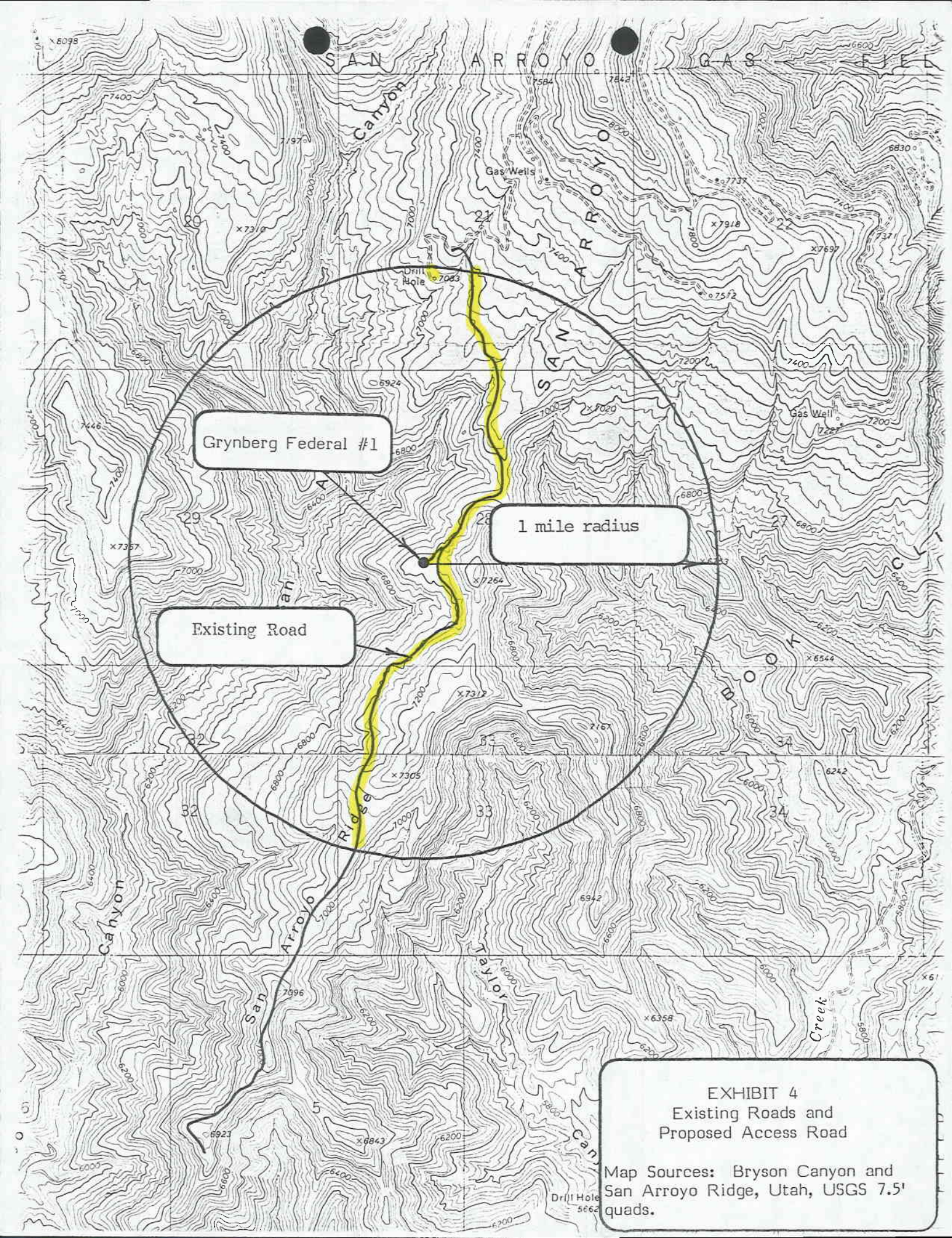
	TVD	Deviation	Angle	MD
Kickoff depth	1000'	0.0'	0.0°	1000'
Angle established	1725'	93.0'	14.7°	1731'
Initial objective	5428'	1068.0'	14.7°	5583'
Total Depth	5800'	1165.0'	14.7°	5968'

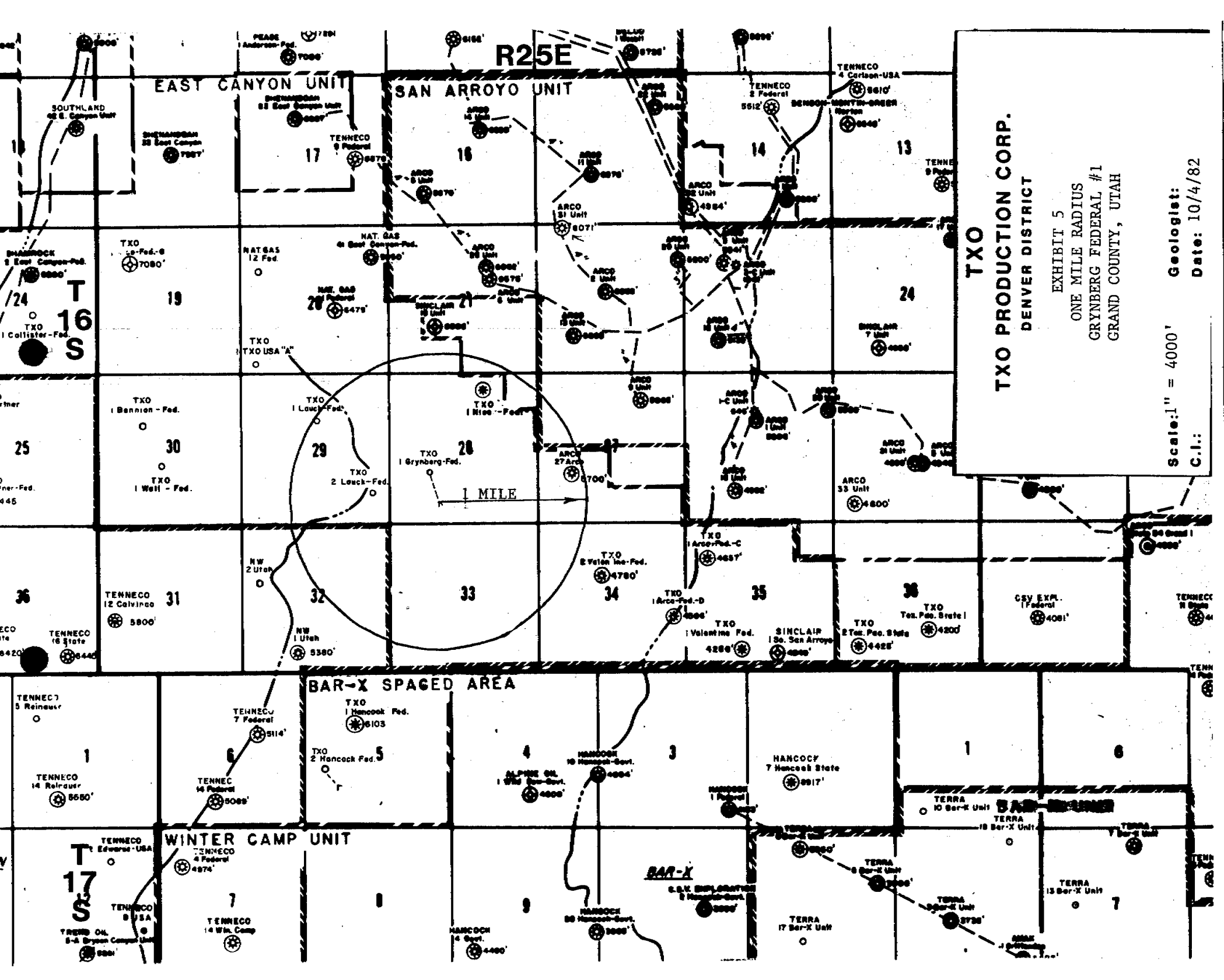
During kickoff, an angle building rate of 2°/100' will be employed with surveys to be taken at between 30 and 90 foot intervals as required by hole conditions. When a total angle of 14.7° from vertical is established, the angle will be held to the proposed TD of 5800' (TVD). The bottomhole target (Dakota sand group) is located 800' FSL, 1750' FWL of Section 28 and is planned with a 300' target radius to comply with applicable state spacing regulations. Again, surveys through this stage of the hole will be taken by hole conditions.

5. CASING PROGRAM AS PER FORM 9-331 C.

6. PRESSURE CONTROL EQUIPMENT:

A. After surface casing is set, a double ram-type blowout preventer with blind rams and pipe rams, with minimum working pressure of 2000 psi (greater than the anticipated bottomhole pressure of 1100 psi), will be installed. See Exhibit 1.


Grynberg Federal #1
1 mile radius
Existing Road
EXHIBIT 4
Existing Roads and
Proposed Access Road
Map Sources: Bryson Canyon and San Arroyo Ridge, Utah, USGS 7.5' quads.


R25E
EAST CANYON UNIT
SAN ARROYO UNIT
BAR-X SPACED AREA
WINTER CAMP UNIT
T 16 S
T 17 S
1 MILE
TXO
TXO PRODUCTION CORP.
DENVER DISTRICT
EXHIBIT 5
ONE MILE RADIUS
GRYNBERG FEDERAL #1
GRAND COUNTY, UTAH
Scale: 1" = 4000'
Geologist:
Date: 10/4/82
C.I.:

B. A choke control, fill and kill lines with minimum working pressure of 2000 psi will be installed.

C. A rotating pack-off head will be installed above the blowout preventer to control flow while drilling with air.

D. The equipment in A and B will be pressure-tested to 2000 psi before drilling surface pipe cement, and the blowout preventer will be tested for operations daily and during trips.

7. MUD PROGRAM:

0'-300' Air or air mist. If necessary, will use spud mud at 8.8-9.2#/gal., vis. 28-32 sec. API.

300'-TD Air or air mist. If necessary, will use aerated 3% KCl mud at 8.6-8.8#/gal., vis. 35-45 sec. API.

8. AUXILIARY EQUIPMENT:

A. A kelly cock will be used.

B. A float valve will be run in the drill string above the bit.

C. A sub with full opening valve will be kept on the derrick floor to stab into DP when kelly is not in use.

9. CORING, LOGGING, TESTING PROGRAM:

A. No coring is anticipated.

B. Logging will consist of the following: DISFL-GR from surface to TD, SNP-FDC-GR-CAL from TD to intermediate pipe; if logged wet, CNL-FDC-GR-CAL.

C. No DST's are planned.

10. ABNORMAL CONDITIONS:

A. No abnormal pressures or temperatures are expected.

B. No hazardous gases such as H_2S are expected.

C. While drilling with gas or air, return fluids will be directed through the blow line to the reserve pit. All open fires or ignition sources will be prohibited on location while gas or air drilling. A pilot flame will be maintained at the end of the blow line (located 125' from the wellhead) to insure burning of return gases that are combustible.

11. ANTICIPATED STARTING DATES:

Spud date	October 30, 1982
Complete drilling	November 15, 1982
Completed, ready for pipeline	November 30, 1982

12. Productive zones will be perforated, tested and treated as necessary. Gas will be flared during testing. Produced water will be contained in the unlined drilling reserve pit. The extent of treatment of a zone (acidizing and/or fracing) can only be determined after the zone has been tested. A completion program will be furnished after drilling and logging.

TXO PRODUCTION CORP.
MULTIPOINT SURFACE USE AND OPERATIONS PLAN

DATE: October 4, 1982

WELL NAME: Grynberg Federal #1

LOCATION: 1813' FSL, 1412' FWL, Section 28-T16S-R25E, Grand County, Utah.

FEDERAL OIL & GAS LEASE NO.: U-13653

NOTE: This application is being filed for a location that was constructed in July of 1980, in accordance with, and under the authority of, an approved NTL-6 permit dated July 8, 1980.

1. EXISTING ROADS

A. Proposed well site as staked. Refer to Exhibit 2. The well site has been staked and constructed 1813' FSL and 1412' FWL in Section 28-T16S-R25E.

B. Route and distance from nearest town or locatable reference point to where well access route leaves main road: From Mack, Colorado, proceed west on Highway 6 for 8 1/4 miles to "2 Road." Then turn right on "2 Road" and proceed northwest on an improved gravel road for 10.2 miles to a fork. Take the left fork and proceed up the San Arroyo Ridge road for 4.4 miles to a fork. Take the left fork and proceed south for 1.4 miles to another fork. Take the right fork and proceed onto the Grynberg Federal #1 location.

C. Access route to location color coded in red and labeled. Refer to Exhibit 3.

D. For development well, all existing roads within one mile color coded in yellow. Refer to Exhibit 4.

E. Plans for improvement and maintenance of existing roads: No upgrading of the existing road will be required. During wet periods some maintenance may be necessary to allow passage by drilling rigs and well servicing vehicles. Dry periods may necessitate watering the road to control dust.

2. PLANNED ACCESS ROAD

Show all necessary roads to be constructed or reconstructed: An access road, approximately 100 feet long, has been constructed between the existing road and the pad. The road is 18-20 feet wide with a grade of 4% or less. There are no cattleguards, gates or turnouts along the access road. Refer to Exhibit 4.

3. LOCATION OF EXISTING WELLS

Exhibit 5 is a one-mile radius locating and identifying the following:

A. Water Wells-None
B. Abandoned Wells-
C. Temporarily Abandoned Wells-None
D. Disposal Wells-None
E. Drilling Wells-None
F. Producing Wells-Arco 27 Arco, Sec. 27-16S-25E
G. Shut-in Wells-TXO Nicor Federal #1, Sec. 28-16S-25E
H. Injection Wells-None
I. Monitoring or Observation Wells for Other Reasons-None

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. Exhibit 5 is a one-mile radius locating the following existing facilities owned by the lessee/operator:

1. Tank Batteries-None
2. Production Facilities-None
3. Oil Gathering Lines-None
4. Gas Gathering Lines-None
5. Injection Lines-None
6. Disposal Lines-None

B. If new facilities are comtemplated, in the event of production, show:

1. Proposed location and attendant lines in relation to the well pad. Refer to Exhibit 6.

2. Dimensions of facilities: Refer to Exhibit 6.

3. The production facilities will include a production pit, a blowdown pit, a production unit, a dehydrator, and a metering facility. These facilities will be painted either a dark green or light tan in accordance with BLM-specified colors fo the Book Cliffs area. The facilities will be located as shown on Exhibit 6. The pit will be located in cut, will contain all water production and be built in accordance with NTL-2B specifications. All connection work will be done by an oil field service company using standard oil field materials.

4. Protective devices and measures to protect livestock and wildlife: The water production pit will be fenced with four strands of barbed wire to protect livestock and wildlife.

5. LOCATION AND TYPE OF WATER SUPPLY

A. Location and type of water supply: Water will be obtained from one of three sources: Westwater Creek, a pond in Section 31-T15S-R23E or West Salt Wash in Colorado. The source selected will depend on water availability and road conditions.

B. Method of transporting water: The water will be hauled in trucks by a certified water hauler, along the route shown in green on Exhibit 3.

C. If water well is to be drilled, so state: No water well is contemplated.

6. SOURCES OF CONSTRUCTION MATERIALS

A. There will be no new construction associated with the Grynberg Federal #1. The layout of the existing pad is shown on Exhibit 7. Approximately 9 inches of topsoil have been removed from the pad area and stockpiled on the southeast corner of the pad. Trees removed during construction have been stockpiled along the east side of the pad.

B. Identify if from Federal or Indian Land: All affected land is federal and under the management of the Bureau of Land Management.

C. Describe where materials such as sand, gravel, stone and soil material are to be obtained and used: Approximately 2,926 cubic yards of material were derived from cuts on location and there were approximately 2,745 cubic yards of fill. Refer to Exhibit 7.

D. Show any needed access roads crossing Federal or Indian Lands: The access road crosses BLM administered lands in Section 28-T16S-R25E. Refer to Exhibit 4.

F. TXO Production Corp. has been granted access right-of-way #U-46833, which provides access to the Grynberg Federal #1.

7. METHODS OF HANDLING WASTE DISPOSAL

A. Cuttings will be contained and disposed of in the reserve pit.

B. Drilling fluids will be contained and disposed of in the reserve pit. While drilling with air or gas, a dust arresting system will be installed on the blow line.

C. Produced fracing fluids will be directed to the reserve pit for evaporation.

D. Sewage: A portable chemical toilet will be on location during operations.

E. Garbage and other trash will be placed in a trash bin and removed to a sanitary landfill upon completion.

F. Protective Devices: The flare pit (if necessary) will be fenced with four strands of barbed wire and flagged to protect animals. The drilling reserve pit will be fenced on three sides during drilling, and on the fourth side prior to the rig moving off location.

G. Statement regarding proper cleanup when rig moves out. When the rig moves out, all trash and refuse will be removed from the location and hauled to a sanitary landfill. All pits will be filled after drying and the area restored as under Item 10 of this plan.

8. ANCILLARY FACILITIES

Identify all proposed camps and airstrips on a map as to their location, area required and construction methods: None planned.

9. WELL SITE LAYOUT ATTACHMENT AND PROPOSED RIG LAYOUT

A. Cross section of drill pad with cuts and fills: Refer to Exhibit 7.

B. Location of mud tank, reserve pit, trash bin, pipe racks and other facilities: Refer to Exhibit 7.

C. Rig orientation, parking area: Refer to Exhibit 7.

D. Statement regarding pit lining: Reserve pit will be unlined. However, if the sub-surface structure is too porous or is highly fractured, a four inch layer of bentonite will be used as a lining for the pit.

10. PLANS FOR RESTORATION OF SURFACE

A. Backfilling, levelling, contouring, and waste disposal: Upon completion of the well, the site will be cleared of all debris and the mouse and rat holes filled. The reserve pit will be dried and backfilled. Disturbed areas of the pad not needed for production facilities will be graded to an appearance consistent with the natural contours. These areas will then be covered with topsoil, disked and reseeded with a seed mixture recommended by BLM. If the well is not commercially productive, the entire pad will be reclaimed as described above.

In the event the well is not a producer, that portion of the access road requested by BLM to be rehabilitated will be covered with topsoil, disked and reseeded with a BLM-recommended seed mixture. Shrubby plants removed during road construction will be scattered randomly along the road to provide a natural appearance, control erosion and enhance seed production.

B. Prior to rig release, pits will be fenced and so maintained until cleanup can be properly done.

C. If any oil is in the pit, it will be removed or overhead flagging will be installed.

D. Timetable for commencement and completion of rehabilitation operations: Rehabilitation will commence when drilling operations are completed, approximately December 20, 1982, and will be completed within approximately one year.

11. OTHER INFORMATION

General description of:

A. Topography, soil characteristics, geologic features, flora, fauna: The location is on a west facing slope. The soil in the area consists of a

silty loam. Vegetation accounts for approximately 60 percent of the ground cover over vegetated areas adjacent to the constructed well pad. Plants present include pinion pine, sagebrush, juniper oak brush, herbs and native grasses. Animals include deer, small mammals, and birds.

B. Other surface-use activities and surface ownership of all involved lands: The affected land is federally owned. The primary surface uses are oil and gas production and ranching.

C. Proximity of water, occupied dwellings, archeological, historical or cultural sites: There are no live streams in the immediate area. An ephemeral stream flows through Bitter Creek Canyon. An archeological survey was performed in May of 1980 and cultural resource clearance was received for construction of the drill pad and access road.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVES

Include the name, address and phone number of the lessee's or operator's field representative who is responsible for assuring compliance with the approved surface use and operations plan.

Ronald E. Dashner
District Drilling Engineer
TXO Production Corp.
1800 Lincoln Center Building
1660 Lincoln Street
Denver, Colorado 80264
(303) 861-4246 - Business
(303) 690-5650 - Residence

Comments regarding the content of this plan or arrangements for an on-site inspection should be directed to:

Paul Urban
Environmental Scientist
TXO Production Corp.
1800 Lincoln Center Building
1660 Lincoln Street
Denver, Colorado 80264
(303) 861-4246 - Business
(303) 429-2908 - Residence

13. CERTIFICATES

The following statement is to be included in the plan and must be signed by the lessee's or operator's field representative who is identified in Item No. 12 of the plan.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access roads; that I am familiar with the conditions which presently exist; and that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by TXO Production Corp. and its contractors, subcontractors in conformity with this plan and the terms and conditions under which it is approved.

DATE: October 4, 1982

R. Bruce Wright for R.E. Dashner
Ronald E. Dashner / District Drilling Engineer

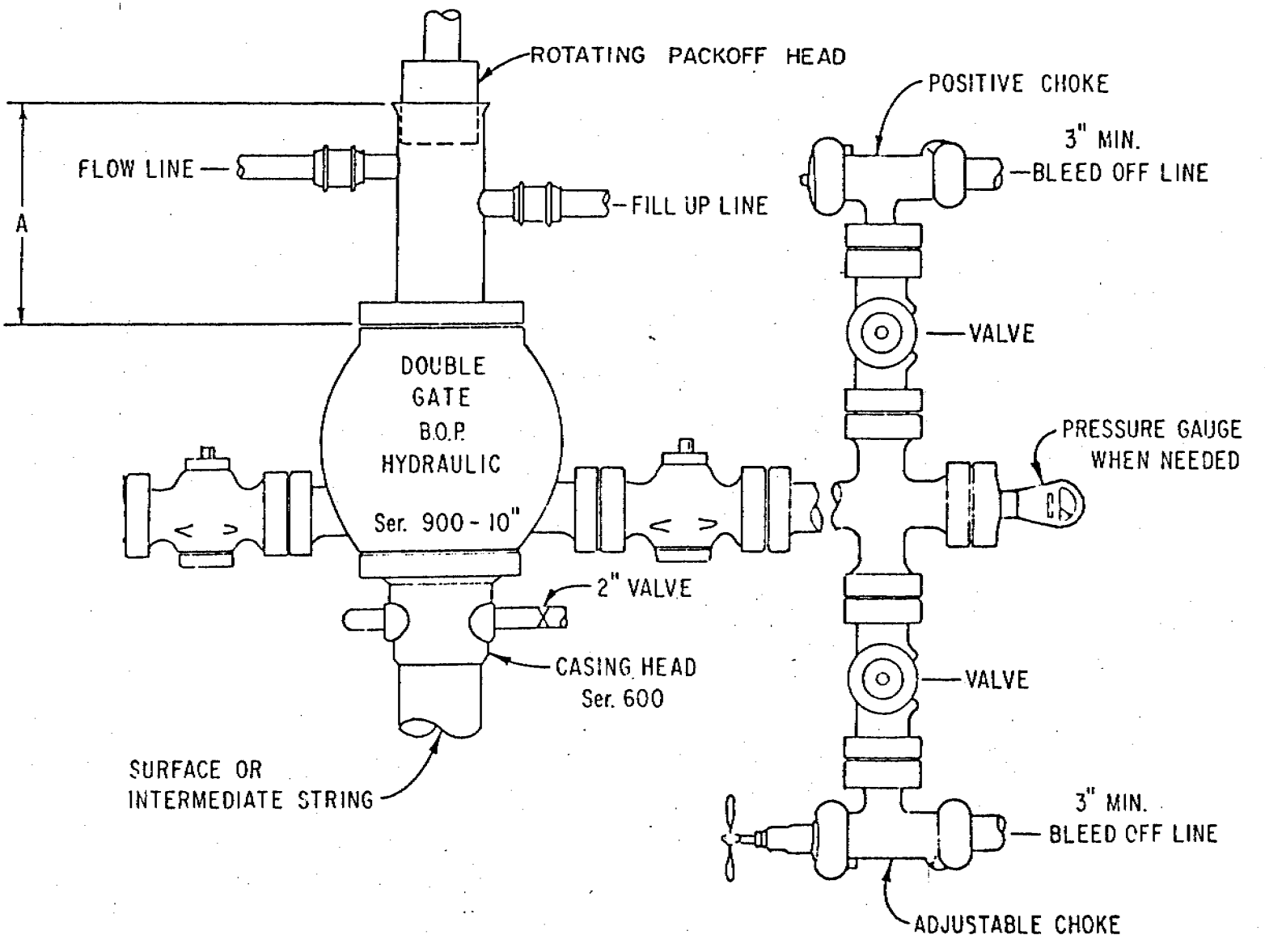


EXHIBIT I

BLOWOUT PREVENTER DIAGRAM

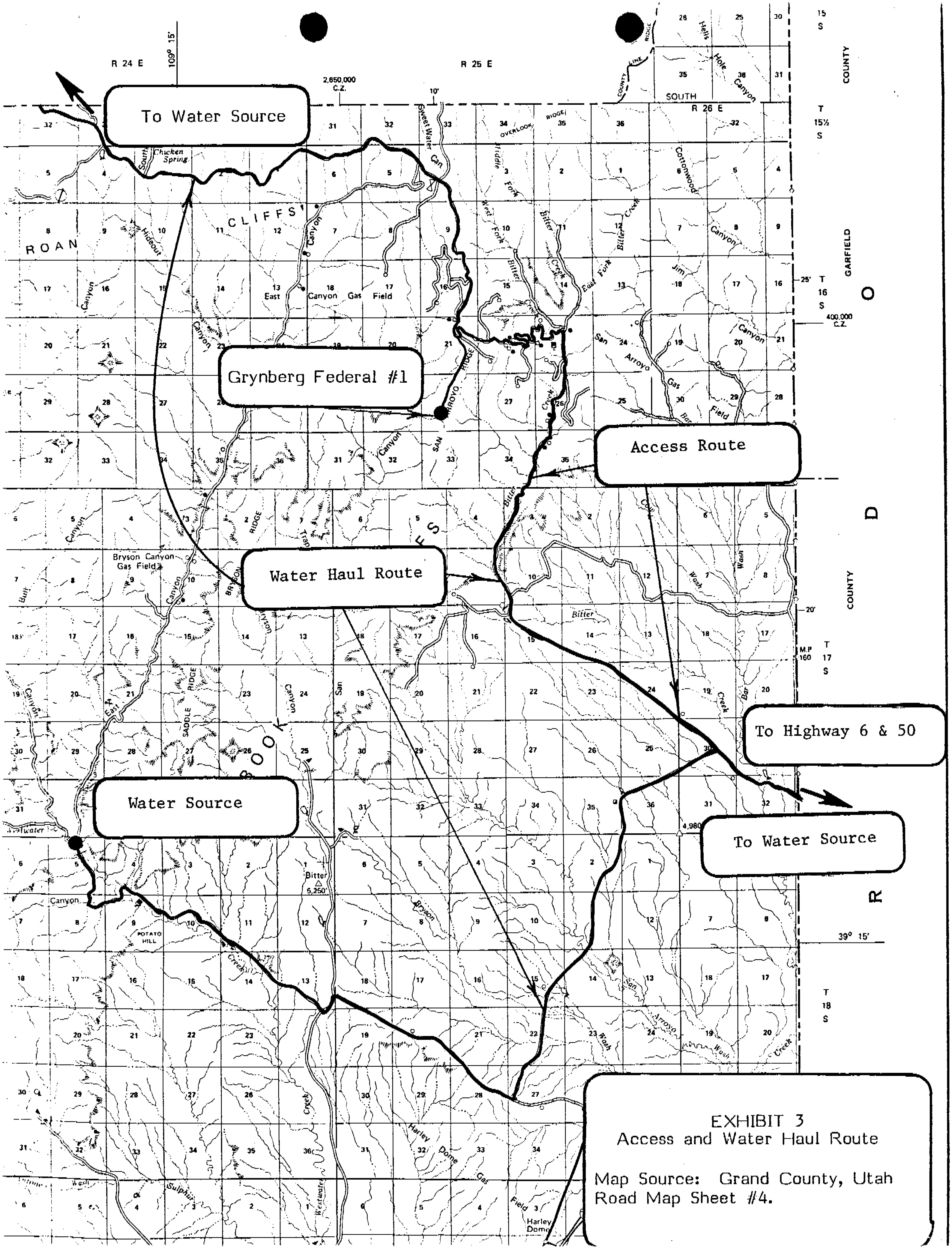
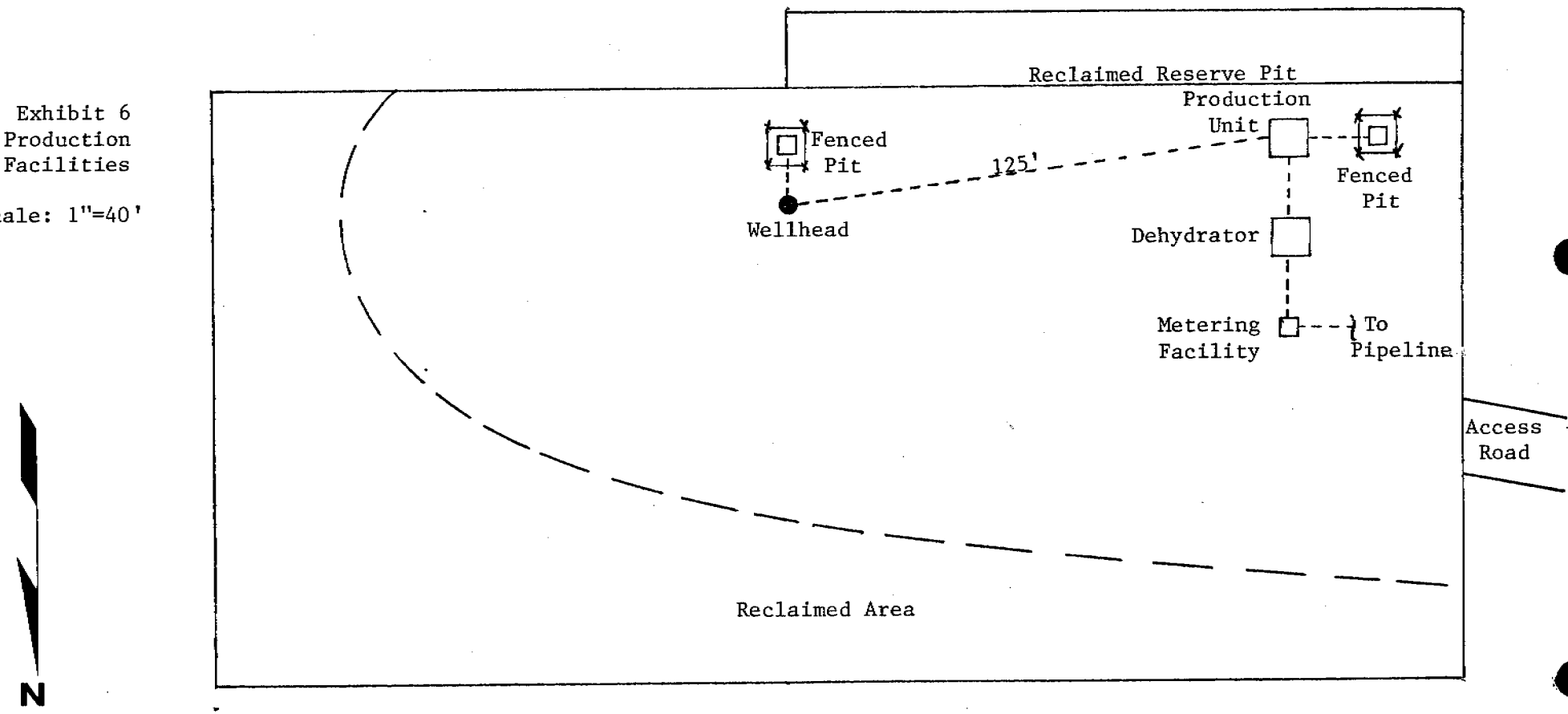


EXHIBIT 3
Access and Water Haul Route

Map Source: Grand County, Utah Road Map Sheet #4.

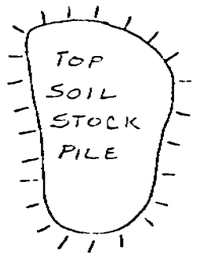
Exhibit 6
Production
Facilities

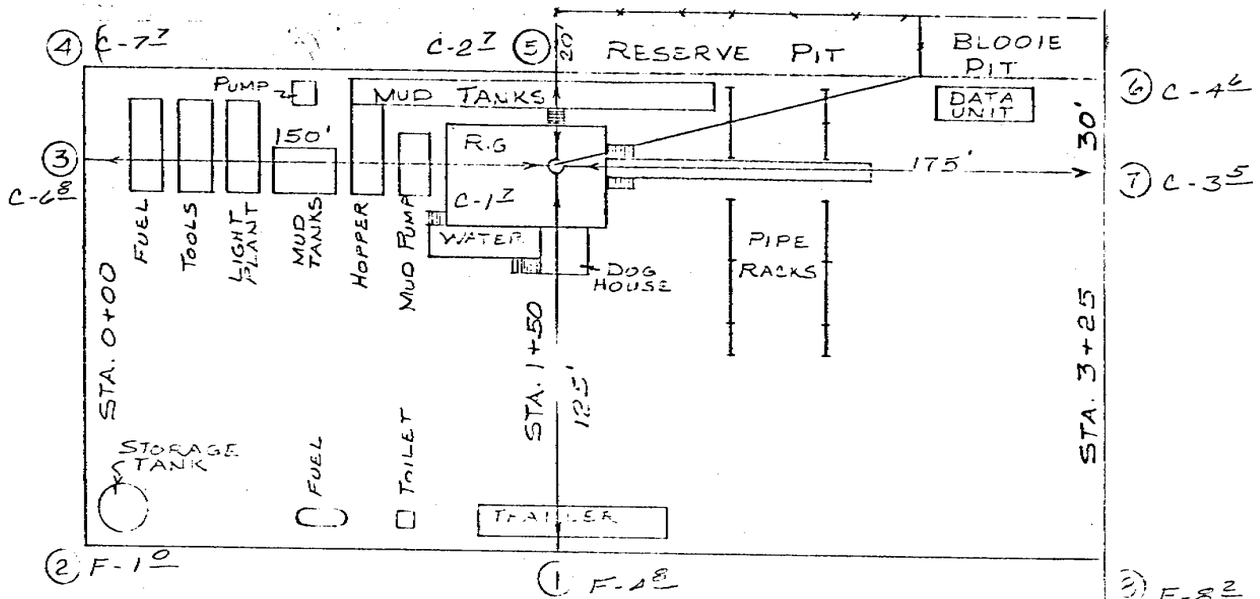
Scale: 1"=40'

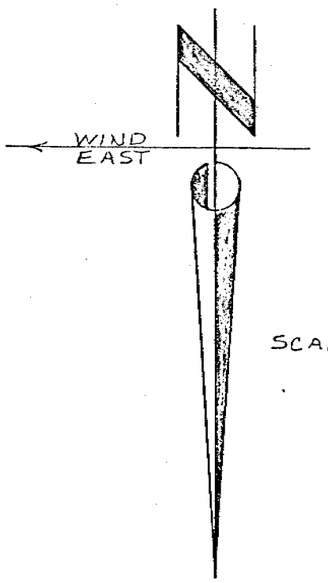


1) Pit will be 10' x 10' x 6' deep, and will be surrounded by a fence.
2) Sacrificial magnesium anodes will be used, if necessary, to control corrosion.
3) All pipelines will be coated and wrapped, then buried.
4) A surface mounted high/low safety shut-down system will be installed.
5) Separator will be an ASME coded vessel.

TEXAS OIL & GAS
GRYNBERG FED. #1
LOCATION LAYOUT & CUT SHEET

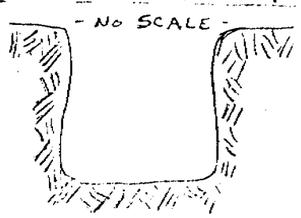






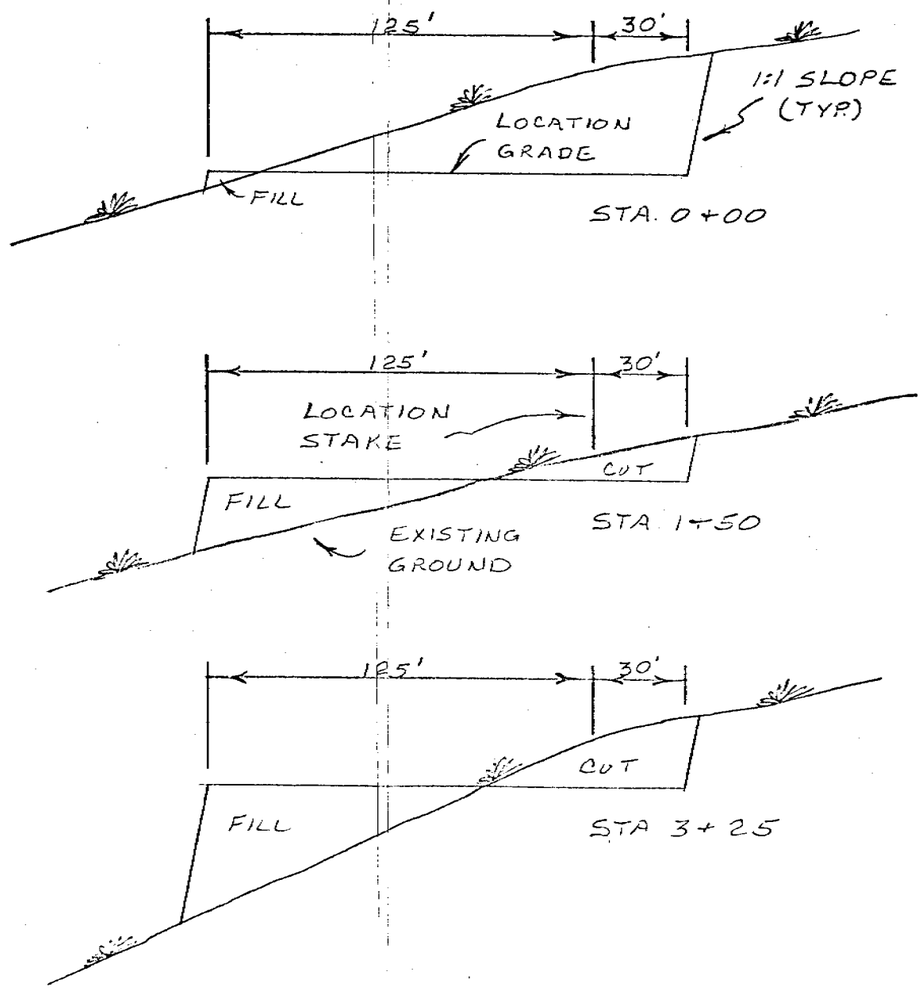
SCALE 1" = 50'

SOILS LITHOLOGY
- NO SCALE -



CROSS SECTIONS

Exhibit 7
Cut & Fill Sheet



SCALES
1" = 50'

APPROX YARDAGES

CUT - 2,726 CU. YDS.
FILL - 2,745 CU. YDS.

Attn: Arlene

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Nationwide Bond No. 199-32-08

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
~~Texas Oil & Gas Corp.~~ TXO Production Corp.

3. ADDRESS OF OPERATOR
1800 Lincoln Center Building, Denver, CO 80264

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
1813' FSL, 1412' FWL, Section 28-T16S-R25E
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.
U-13653

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
---

7. UNIT AGREEMENT NAME
---

8. FARM OR LEASE NAME
Grynberg Federal

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
San Arroyo Field

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 28-T16S-R25E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
20 miles NW of Mack, Colorado

12. COUNTY OR PARISH: Grand
13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
827'	280	320'
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
----	5965'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
7020' GR

22. APPROX. DATE WORK WILL START*
July 15, 1980

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36# New	0' - 250'	Cement to Surface
7 7/8"	4 1/2"	10.5# New	250' - TD	Cement top at 5200'

If water is encountered in the Castlegate (2055'), 7" casing will be set with 150 sacks of cement and a 6 1/4" hole drilled to TD.

C.A. required prior to any sales

Pipeline NOT approved!

RECEIVED
OCT 12 1982
DIVISION OF
OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
SIGNED L.A. Varela TITLE Drilling & Production Manager DATE March 28, 1980

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY W.P. Martin TITLE FOR E. W. GUYNN DISTRICT ENGINEER DATE JUL 08 1980

CONDITIONS OF APPROVAL, IF ANY:

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY
*See Instructions On Reverse Side

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80

File

OPERATOR TXO Production Corp DATE 10-8-82

WELL NAME Grynberg Fed. #1

SEC NESW 28 T 16S R 25E COUNTY Grand

43-019-30657	Fed.
API NUMBER	TYPE OF LEASE

POSTING CHECK OFF:

☐ INDEX	☐ HL	☐
☐ NID	☐ PI	☐
☐ MAP	☐	☐

PROCESSING COMMENTS:
Approve as per Cause No. 149-3, 7/28/82 an exception location due to topographic and geological considerations.
Furnish Division with copies of directional survey information
Assign name API #.

APPROVAL LETTER:

SPACING: ☐ A-3 _____ UNIT ☐ c-3-a 149-3 5/28/80 CAUSE NO. & DATE

☐ c-3-b ☐ c-3-c

~~SPECIAL LANGUAGE~~:
original never rescinded, so approval ltr of 10-8-82 an up date only.

October 8, 1982

TXO Production Corp.
Attn: Paul Urban
1800 Lincoln Center Building
Denver, Coloraco 80264

RE; Well No. Grynberg Federal #1
NESW Sec. 28, T.16S, R.25E
Grand County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to gas well is hereby granted in accordance with the Order issued in Cause No. ~~194-3~~ 145-3 dated May 28, 1980.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

RONALD J. FIRTH - Engineer Office: 533-5771 Home: 571-6068	OR	CLEON B. FEIGHT - Director Office: 533-5771 Home: 466-4455

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified. Also please furnish the Division with copies of directional survey information.

The API number assigned to this well is 43-019-30657.

Sincerely,

R. J. Firth
Chief Petroleum Engineer

RJF/as
cc: Minerals Management Service
Enclosure

NOTICE OF SPUD

Company: TXO Prod. Corp.

Caller: Bruce Wright

Phone: #303-861-4046

Well Number: Gryberg #1

Location: 1/4 Sec 28, 16S 25E

County: Grand State: Utah

Lease Number: U-13653

Lease Expiration Date: _____

Unit Name (If Applicable): _____

Date & Time Spudded: 1-28-83 12:30 P.M.

Dry Hole Spudder/(Rotary): _____

Details of Spud (Hole, Casing, Cement, etc.) 12¼" to 320'

Rotary Rig Name & Number: CRC Colorado Well #75

Approximate Date Rotary Moves In: 1-27-83

FOLLOW WITH SUNDRY NOTICE

Call Received By: Cindy Luce

Date: 1-31-83 10:30

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: TXO Production Corp.

WELL NAME: Grynberg Federal #1

SECTION NESW 28 TOWNSHIP 16S RANGE 25E COUNTY Grand

DRILLING CONTRACTOR CRC Colorado Well

RIG # 75

SPUDDED: DATE 1-28-83

TIME 12:30 PM

HOW Rotary

DRILLING WILL COMMENCE

REPORTED BY Bruce Wright

TELEPHONE # 303-861-4246

DATE 1-31-83 SIGNED AS

TXO

TXO PRODUCTION CORP.
1800 LINCOLN CENTER BUILDING
DENVER, COLORADO 80264

TELEPHONE (303) 861-4246

February 25, 1983

STATE OF UTAH
Natural Resources & Energy
Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Attention: Mr. Cleon B. Feight
Director

RE: GRYNBERG FEDERAL #1
Section 28, T16S-R25E
Grand County, Utah

Dear Mr. Feight:

Please be advised that TXO Production Corp. would appreciate having the status of the above referenced well changed to a tight hole.

Thank you for your attention to this matter.

Sincerely,

TXO PRODUCTION CORP.

Diedre Erin Kay

Diedre Erin Kay
Drilling Secretary

DEK

DIG

SUB-SURFACE DIRECTIONAL SURVEY REPORT

TEXAS OIL & GAS
COMPANY

GRYNBERG FEDERAL NO.1
WELL NAME

GRAND COUNTY, UTAH
STATE AND COUNTY

TYPE OF SURVEY	MAGNETIC SINGLE SHOT	TYPE OF SURVEY
JOB NUMBER	D-2118	JOB NUMBER
SURVEYOR	RALPH NICKEL	SURVEYOR
DEPTHS	0' TO 6015'	DEPTHS
DATE	2/11/83	DATE
DISTRICT	ROCKY MOUNTAIN	DISTRICT

1 .CUSTOMER :TEXAS OIL AND GAS

2 .WELL # :GRYNBERG FEDERAL NO. 1

3 .LOCATION :GRAND COUNTY, UTAH

4 .DATE :2-11-83

5 .JOB TYPE :MAG. SINGLE SHOT

6 .JOB # :

7 .SURVEYOR :RALPH NICKEL

8 .DEPTHS :0' TO 6015'

9 .DECL. :15E

10.ELEV. :

11.FILE # :WT-E11

RADIUS OF CURVATURE METHOD

PLANE OF PROPOSAL: S 15.00 E

PRINT FORMAT='DECIMAL DEGREES'

```
**************************************
* THIS SURVEY IS CORRECT TO THE      *
* BEST OF MY KNOWLEDGE AND IS        *
* SUPPORTED BY ACTUAL FIELD DATA.    *
*                                    *
* _____                              *
*     COMPANY REPRESENTATIVE         *
**************************************
```

FINAL STATION DATA:

MEASURED DEPTH FEET	INCLINATION ANGLE DEG.	HOLE DIRECTION DEG.	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	SUBSEA DEPTH FEET	VERTICAL SECTION FEET	RECTANGULAR COORDINATES N/S	E/W	DOGLEG SEVERIT DG/100F
6015.00	0.25	S 45.00 E	119.00	5865.40	5865.40	1067.40	967.40 S	513.86 E	.76

CLOSURE	DIRECTION	DISTANCE
	S 27.98 E	1095.40

MEASURED DEPTH FEET	INCLINATION ANGLE DEG.	HOLE DIRECTION DEG.	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	SUBSEA DEPTH FEET	VERTICAL SECTION FEET	RECTANGULAR COORDINATES N/S	RECTANGULAR COORDINATES E/W	DOGLEG SEVERIT DG/100F
0.00	0.00	N 00.00 E	0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00
398.00	1.25	N 49.00 W	398.00	397.97	397.97	-3.60	2.85 N	3.28 W	.31
494.00	1.00	N 45.00 W	96.00	493.95	493.95	-5.20	4.13 N	4.65 W	.27
617.00	.75	N 70.00 W	123.00	616.94	616.94	-6.57	5.13 N	6.23 W	.37
767.00	1.25	N 37.00 W	150.00	766.91	766.91	-8.59	6.67 N	8.30 W	.50
890.00	1.00	N 62.00 W	123.00	889.89	889.89	-10.57	8.23 N	10.12 W	.44
982.00	.75	N 48.00 W	92.00	981.88	981.88	-11.64	9.03 N	11.27 W	.36
1004.00	.25	N 43.00 W	22.00	1003.88	1003.88	-11.81	9.16 N	11.41 W	2.28
1034.00	1.00	S 30.00 E	30.00	1033.87	1033.87	-11.72	9.03 N	11.59 W	4.15
1064.00	2.00	S 35.00 E	30.00	1063.86	1063.86	-10.97	8.37 N	11.17 W	3.36
1095.00	3.00	S 35.00 E	31.00	1094.83	1094.83	-9.70	7.26 N	10.39 W	3.23
1127.00	4.25	S 36.00 E	32.00	1126.77	1126.77	-7.81	5.62 N	9.21 W	3.91
1157.00	5.50	S 34.00 E	30.00	1156.66	1156.66	-5.41	3.53 N	7.75 W	4.20
1188.00	6.75	S 34.00 E	31.00	1187.48	1187.48	-2.29	.78 N	5.90 W	4.03
1218.00	8.00	S 34.00 E	30.00	1217.23	1217.23	1.36	2.41 S	3.75 W	4.17
1249.00	9.25	S 36.00 E	31.00	1247.88	1247.88	5.72	6.22 S	1.08 W	4.15
1281.00	10.25	S 38.00 E	32.00	1279.42	1279.42	10.75	10.54 S	2.18 E	3.30
1312.00	11.75	S 41.00 E	31.00	1309.85	1309.85	16.13	15.11 S	5.94 E	5.18
1343.00	13.00	S 42.00 E	31.00	1340.13	1340.13	22.08	20.08 S	10.34 E	4.09
1375.00	14.00	S 40.00 E	32.00	1371.24	1371.24	28.79	25.72 S	15.24 E	3.45
1459.00	16.00	S 39.00 E	84.00	1452.38	1452.38	48.57	42.50 S	29.07 E	2.40
1520.00	16.25	S 41.00 E	61.00	1510.98	1510.98	63.93	55.47 S	39.96 E	1.00
1583.00	16.75	S 41.00 E	63.00	1571.38	1571.38	80.01	68.98 S	51.70 E	.79
1645.00	17.00	S 41.00 E	62.00	1630.71	1630.71	96.18	82.56 S	63.51 E	.40
1706.00	17.00	S 40.00 E	61.00	1689.05	1689.05	112.28	96.12 S	75.09 E	.48
1769.00	17.25	S 41.00 E	63.00	1749.26	1749.26	129.03	110.23 S	87.14 E	.61
1829.00	17.25	S 42.00 E	60.00	1806.56	1806.56	144.95	123.56 S	98.93 E	.49
1891.00	17.25	S 41.00 E	62.00	1865.77	1865.77	161.41	137.33 S	111.11 E	.48
1952.00	17.25	S 42.00 E	61.00	1924.02	1924.02	177.60	150.88 S	123.10 E	.49
2014.00	17.00	S 40.00 E	62.00	1983.28	1983.28	194.01	164.66 S	135.08 E	1.03

MEASURED DEPTH FEET	INCLINATION ANGLE DEG.	HOLE DIRECTION DEG.	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	SUBSEA DEPTH FEET	VERTICAL SECTION FEET	RECTANGULAR COORDINATES N/S	RECTANGULAR COORDINATES E/W	DOGLEG SEVERIT DG/100F
2106.00	16.75	S 42.00 E	92.00	2071.31	2071.31	218.01	184.81 S	152.60 E	.69
2198.00	16.75	S 42.00 E	92.00	2159.41	2159.41	241.63	204.51 S	170.34 E	0.00
2292.00	16.50	S 42.00 E	94.00	2249.48	2249.48	265.60	224.50 S	188.34 E	.27
2384.00	15.75	S 42.00 E	92.00	2337.86	2337.86	288.37	243.49 S	205.44 E	.82
2506.00	15.00	S 43.00 E	122.00	2455.49	2455.49	317.06	267.34 S	227.29 E	.65
2600.00	15.00	S 43.00 E	94.00	2546.29	2546.29	338.54	285.13 S	243.88 E	0.00
2660.00	16.00	S 47.00 E	60.00	2604.11	2604.11	352.42	296.47 S	255.22 E	2.44
2709.00	16.75	S 40.00 E	49.00	2651.12	2651.12	364.55	306.48 S	264.72 E	4.31
2741.00	17.75	S 38.00 E	32.00	2681.68	2681.68	373.22	313.85 S	270.69 E	3.63
2771.00	18.00	S 35.00 E	30.00	2710.23	2710.23	381.78	321.25 S	276.17 E	3.18
2802.00	18.50	S 32.00 E	31.00	2739.67	2739.67	390.98	329.34 S	281.53 E	3.43
2832.00	18.25	S 28.00 E	30.00	2768.14	2768.14	400.12	337.53 S	286.26 E	4.28
2863.00	18.75	S 23.00 E	31.00	2797.54	2797.54	409.79	346.41 S	290.49 E	5.36
2896.00	19.50	S 22.00 E	33.00	2828.72	2828.72	420.51	356.40 S	294.63 E	2.48
2925.00	20.00	S 20.00 E	29.00	2856.01	2856.01	430.26	365.55 S	298.14 E	2.90
2955.00	19.75	S 15.00 E	30.00	2884.23	2884.23	440.44	375.27 S	301.21 E	5.73
2985.00	20.00	S 13.00 E	30.00	2912.44	2912.44	450.64	385.17 S	303.68 E	2.41
3017.00	19.75	S 11.00 E	32.00	2942.53	2942.53	461.51	395.81 S	305.94 E	2.26
3048.00	19.25	S 08.00 E	31.00	2971.76	2971.76	471.80	406.01 S	307.65 E	3.61
3133.00	19.00	S 05.00 E	85.00	3052.06	3052.06	499.34	433.68 S	310.80 E	1.19
3193.00	19.00	S 05.00 E	60.00	3108.79	3108.79	518.58	453.14 S	312.50 E	0.00
3285.00	19.00	S 05.00 E	92.00	3195.78	3195.78	548.08	482.98 S	315.11 E	0.00
3471.00	19.00	S 06.00 E	186.00	3371.65	3371.65	607.81	543.26 S	320.91 E	.18
3656.00	16.75	S 08.00 E	185.00	3547.71	3547.71	664.03	599.61 S	327.83 E	1.26
3719.00	16.00	S 08.00 E	63.00	3608.15	3608.15	681.66	617.20 S	330.30 E	1.19
3812.00	15.00	S 11.00 E	93.00	3697.77	3697.77	706.39	641.71 S	334.40 E	1.38
3904.00	13.75	S 17.00 E	92.00	3786.89	3786.89	729.22	663.86 S	339.92 E	2.11
3965.00	12.50	S 19.00 E	61.00	3846.29	3846.29	743.05	677.03 S	344.20 E	2.18
4026.00	11.75	S 23.00 E	61.00	3905.93	3905.93	755.79	688.99 S	348.79 E	1.85
4056.00	11.50	S 22.00 E	30.00	3935.31	3935.31	761.77	694.57 S	351.10 E	1.07

MEASURED DEPTH FEET	INCLINATION ANGLE DEG.	HOLE DIRECTION DEG.	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	SUBSEA DEPTH FEET	VERTICAL SECTION FEET	RECTANGULAR COORDINATES N/S	E/W	DOGLEG SEVERIT DG/100F
4086.00	11.25	S 27.00 E	30.00	3964.72	3964.72	767.61	699.95 S	353.55 E	3.39
4140.00	11.25	S 27.00 E	54.00	4017.69	4017.69	777.91	709.34 S	358.33 E	0.00
4200.00	12.00	S 30.00 E	60.00	4076.46	4076.46	789.66	719.96 S	364.10 E	1.61
4261.00	13.00	S 27.00 E	61.00	4136.01	4136.01	802.50	731.56 S	370.40 E	1.95
4319.00	14.00	S 27.00 E	58.00	4192.41	4192.41	815.74	743.62 S	376.55 E	1.72
4383.00	15.00	S 29.00 E	64.00	4254.37	4254.37	831.35	757.77 S	384.07 E	1.75
4444.00	15.75	S 28.00 E	61.00	4313.18	4313.18	847.08	771.98 S	391.79 E	1.30
4476.00	16.00	S 29.00 E	32.00	4343.96	4343.96	855.59	779.67 S	395.97 E	1.16
4514.00	15.75	S 31.00 E	38.00	4380.51	4380.51	865.63	788.67 S	401.17 E	1.58
4581.00	12.25	S 29.00 E	67.00	4445.51	4445.51	881.28	802.70 S	409.27 E	5.27
4612.00	11.00	S 28.00 E	31.00	4475.88	4475.88	887.35	808.19 S	412.25 E	4.08
4674.00	9.00	S 29.00 E	62.00	4536.93	4536.93	897.82	817.65 S	417.39 E	3.24
4735.00	7.75	S 26.00 E	61.00	4597.28	4597.28	906.49	825.53 S	421.49 E	2.17
4828.00	6.50	S 20.00 E	93.00	4689.56	4689.56	917.91	836.14 S	426.00 E	1.56
4920.00	5.00	S 19.00 E	92.00	4781.09	4781.09	927.10	844.83 S	429.08 E	1.63
5044.00	7.00	S 25.00 E	124.00	4904.41	4904.41	939.95	856.84 S	433.93 E	1.69
5137.00	6.00	S 21.00 E	93.00	4996.81	4996.81	950.38	866.53 S	438.04 E	1.18
5260.00	6.75	S 22.00 E	123.00	5119.05	5119.05	963.95	879.24 S	443.05 E	.62
5383.00	9.50	S 40.00 E	123.00	5240.80	5240.80	980.59	894.08 S	451.97 E	3.02
5434.00	10.50	S 42.00 E	51.00	5291.03	5291.03	988.55	900.76 S	457.78 E	2.08
5527.00	8.75	S 43.00 E	93.00	5382.71	5382.71	1002.30	912.22 S	468.28 E	1.89
5620.00	9.50	S 35.00 E	93.00	5474.54	5474.54	1015.80	923.67 S	477.55 E	1.58
5711.00	8.25	S 44.00 E	91.00	5564.44	5564.44	1028.60	934.49 S	486.47 E	2.05
5804.00	7.50	S 35.00 E	93.00	5656.57	5656.57	1040.10	944.31 S	494.57 E	1.55
5896.00	8.50	S 39.00 E	92.00	5747.67	5747.67	1052.00	954.53 S	502.27 E	1.24
6015.00	8.25	S 45.00 E	119.00	5865.40	5865.40	1067.40	967.40 S	513.86 E	.76

WELL NAME:	Grynberg Federal #1	PTD:	5970'
AREA:	San Arroyo	ELEVATIONS:	7020' GL, 7034' KB
LOCATION:	Section 28, T16S-R25E	CONTRACTOR:	CRC #75
COUNTY:	Grand	AFE NUMBER:	800842
STATE:	Utah	LSE NUMBER:	90937
FOOTAGE:	1813' FSL, 1412' FWL	TXO WI:	70.3125%

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GRYNBERG PETROLEUM COMPANY — Call Daily, Mail Weekly
5000 S. Quebec, Ste. 500
Denver, Colorado 80237
Attn: Ginger Howell
Phone: (303) 850-7490

ROBERT C. LAU — Mail Weekly
2755 S. Locust Street, Ste. 103
Denver, Colorado 80222

NICOR EXPLORATION COMPANY — ~~Call Daily~~ Mail Weekly
1667 Cole Blvd.
Golden, Colorado 80401
Attn: Sandy Broski
Phone: (303) 232-9292

BUCKHORN PETROLEUM — Call Daily, Mail Weekly
P. O. Box 5928 T.A.
Denver, Colorado 80217
Attn: Sheri Van Decar
Phone: (303) 825-4771

APCOT FINADEL JOINT VENTURE — Mail Weekly
American Petrofina, Inc.
P. O. Box 2159
Dallas, Texas 75221
Attn: James Henderson

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01/29/83 327' (327'), cmtg 9-5/8" csg. Mesaverde. Air mist 150#. Spud 12-1/4" hole @ 12:30 PM 1/28/83. Hole tight to 327'. TD 12-1/4" hole @ midnight 1/28/83. Blow hole. TOOH. TIH. 5' of fill. Blow hole. TOOH. Run 8 jts 9-5/8", 36#, K-55. Float @ 280' KB. Shoe @ 320' KB. Hole had 19' fill. Couldn't circ out. Currently cmtg surf pipe. 1-1/4° @ 327'. DW: 30,851. CW: 30,851. DD 1.

01/30/83 327' (0'), drill out cmt shoe. Mesaverde. Dust 125#. Pump 32 BW. Cmt w/ 100 sxs 50/50 poz w/ 2% gel & 2% $CaCl_2$. Tail w/ 60 sxs Cl "G" w/ 2% $CaCl_2$ & 3#/sx gilsonite. Dspl w/ 24 bbls KCL wtr. PD @ 7:10 AM 1/29/83. BP to 200#. Float held. Full returns. Bled back 1/2 bbl. DW: 10,519. CW: 41,370. DD 2.

01/31/83 998' (671'), TOOH for dyna-drill. Mesaverde. Mist 175#. Drld to 998'. Misted up hole for dyna-drill run. Made 5 stnd short trip. Had no tight spots or fill. TOOH. RU dyna-drill #1. TIH. Dyna-drill wouldn't drill. TOOH to PU new dyna-drill. 1-1/4° @ 398', 1° @ 494', 3/4° @ 675', 1-1/4° @ 767', 1° @ 890'. DW: 13,894. CW: 55,264. DD 3.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					N	W
982'	3/4°	N 48 W	981.89	-12.23	9.07	11.33

02/01/83 1420' (423'), reaming to btm. Mesaverde. Mist 300#. Drld w/ dyna-drill #2 to 1420'. TOOH. Bit was T-8, B-8, O-$\frac{1}{4}$. PU new bit, full-gauge near-bit IBS, monel collar, under-gauge IBS, DC, full-gauge IBS. TIH to 1000' & begin reaming to btm. DW: 38,773. CW: 94,037. DD 4.

WELL NAME:	Grynberg Federal #1	PTD:	5970'
AREA:	San Arroyo	ELEVATIONS:	7020' GL, 7034' KB
LOCATION:	Section 28, T16S-R25E	CONTRACTOR:	CRC #75
COUNTY:	Grand	AFE NUMBER:	800842
STATE:	Utah	LSE NUMBER:	90937
FOOTAGE:	1813' FSL, 1412' FWL	TXO WI:	70.3125%

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02/01/83 cont.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES N	S	E	W
1004'	1/4°	N43W	1003.89'	-12.41	9.21			11.47
1034'	1°	S30E	1033.88'	-12.31	9.01			11.73
1064'	2°	S35E	1063.87'	-11.54	8.35			11.31
1095'	3°	S35E	1094.84'	-10.25	7.24			10.53
1127'	4-1/4°	S36E	1126.78'	- 8.31	5.60			9.36
1157'	5-1/2°	S34E	1156.67'	- 5.86	3.51			7.90
1188'	6-3/4°	S34E	1187.49'	- 2.67	0.77			6.05
1218'	8°	S34E	1217.25'	1.05		2.43		3.89
1249'	9-1/4°	S36E	1247.90'	5.51		6.23		1.23
1281'	10-1/4°	S38E	1279.43'	10.66		10.56	2.03	
1312'	11-3/4°	S41E	1309.86'	16.19		15.13	5.80	
1343'	13°	S42E	1340.14'	22.31		20.10	10.20	
1375'	14°	S40E	1371.26'	29.23		25.74	15.10	

02/02/83 2027' (607'), drlg. Buck Tongue. Mist 190#. Fin reaming to btm. Began drlg. Drld to 1829'. Unable to maintain desired angle & direction. TOOH. Move middle & top IBS around. New BHA is: bit, full-gauge near-bit IBS, monel collar, full-gauge IBS, DC, under-gauge IBS. TIH & resume drlg. Varying wt & RPM to maintain angle & direction. Buck Tongue @ 1780'. DW: 16,429. CW: 110,466. DD 5.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES S	E
1459'	16°	S39E	1452.40'	49.56'	42.52	28.93
1520'	16-1/4°	S41E	1511.00'	65.35'	55.49	39.82
1583'	16-3/4°	S41E	1571.40'	81.91'	69.00	51.56
1645'	17°	S41E	1630.73'	98.57'	82.58	63.37
1706'	17°	S40E	1689.07'	115.13'	96.14	74.95
1769'	17-1/4°	S41E	1749.27'	132.36'	110.25	87.00
1829'	17-1/4°	S42E	1806.58'	148.77'	123.57	98.79
1891'	17-1/4°	S41E	1865.79'	165.73'	137.34	110.97
1952'	17-1/4°	S42E	1924.04'	182.41'	150.89	122.95
2014'	17°	S40E	1983.29'	199.30'	164.67	134.33

02/03/83 2530' (503'), WOC. Mancos. Mist 200#. Drld to 2530'. Blew hole. Made 10 stnd short trip. Had 10' of fill. Blew hole. TOOH. RU & ran 58 jts 7", 20#, K-55, ST&C, set @ 2530' KB. FC @ 2485' KB. Cmtd w/ 100 BM, 10 bbls mud flush, 2 BW, 75 sxs 50/50 poz w/ 2% $CaCl_2$, friction reducer, 1/4#/sx celloflake tailed by 175 sxs Cl "G" w/ 2% $CaCl_2$, friction reducer, & 1/4#/sx celloflake. Dspl w/ 102 BW. PD @ 5:17 AM on 2/3/83. BP to 1200#. Float held. Returns to surf. ND BOP & set slips. Castlegate @ 2084', Mancos @ 2300'. DW: 54,842. CW: 165,308.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES S	E
2106'	16-3/4°	S42E	2071.33'	223.78'	184.83	151.85
2198'	16-3/4°	S42E	2159.43'	248.38'	204.53	170.19
2292'	16-1/2°	S42E	2249.50'	273.09'	224.52	188.19
2384'	15-3/4°	S42E	2337.88'	296.57'	243.50	205.29
2506'	15°	S43E	2455.51'	326.18'	267.35	227.14

02/04/83 2620' (90'), drlg. Mancos. Dust 200#. Set slips, NU & test BOP. PU BHA. New BHA is bit, float sub, 3 pt reamer, & monel collar. TIH. Start drlg cmt, pressured up. TOOH. Float was plugged. Cleaned out float sub & TIH. Couldn't circ. TOOH. Float sub was ruined. TIH w/ new float sub & resume drlg. DW: 11,878. CW: 177,186.

WELL NAME:	Grynberg Federal #1	PTD:	5970'
AREA:	San Arroyo	ELEVATIONS:	7020' GL, 7034' KB
LOCATION:	Section 28, T16S-R25E	CONTRACTOR:	CRC #75
COUNTY:	Grand	AFE NUMBER:	800842
STATE:	Utah	LSE NUMBER:	90937
FOOTAGE:	1813' FSL, 1412' FWL	TXO WI:	70.3125%

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02/04/83 cont.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
2600'	15°	S43E	2546.31'	348.36'	285.15	243.73

02/05/83 3032' (412'), drlg w/ dyna-drill. Mancos. Mist 300#. Drld to 2675'. Unable to obtain desired course direction. Misted up hole for dyna-drill run. TOOH. Bit broke off in rotary table @ pin. Unable to get pin out of float sub. WO new float sub. PU bit, new float sub, dyna-drill, 1-1/2° bent sub & TIH. Began drlg w/ dyna-drill. Mancos top @ 2770' MD, 2710' TVD. DW: 13,615. CW: 190,801. DD 8.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
2660'	16°	S47E	2604.13'	362.74'	296.48	255.07
2709'	16-3/4°	S40E	2651.14'	375.28'	306.50	264.58
2741'	17-3/4°	S38E	2681.70'	384.19'	313.88	270.55
2771'	18°	S35E	2710.25'	392.96'	321.28	276.03
2802'	18-1/2°	S32E	2739.69'	402.35'	329.38	281.39
2832'	18-1/4°	S28E	2768.17'	411.62'	337.57	286.12
2863'	18-3/4°	S23E	2797.56'	421.39'	346.44	290.35
2896'	19-1/2°	S22E	2828.74'	432.18'	356.43	294.44
2925'	20°	S20E	2856.04'	441.97'	365.58	298.00
2955'	19-3/4°	S15E	2884.25'	452.17'	375.31	301.07
2985'	20°	S13E	2912.46'	462.33'	385.21	303.53
3017'	19-3/4°	S11E	2942.56'	473.13'	395.85	305.80

02/06/83 3750' (718'), drlg. Mancos. Dust 180#. Drld w/ dyna-drill to 3095'. TOOH. PU new BHA. New BHA consists of: bit, float sub, 3 pt reamer, monel collar, under-gauge IBS, DC & 3 pt reamer. TIH, blow hole dry & resume drlg, varying wt & RPM to control deviation & direction. DW: 13,600. CW: 204,401. DD 9.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
3048'	19-1/4°	S8E	2971.78'	483.35'	406.05	307.50
3133'	19°	S5E	3052.09'	510.56'	433.72	310.66
3193'	19°	S5E	3108.82'	529.54'	453.18	312.36
3285'	19°	S5E	3195.81'	558.63'	483.02	314.97
3471'	19°	S6E	3371.67'	617.57'	543.30	320.77
3656'	16-3/4°	S8E	3547.74'	673.17'	599.66	327.69
3719'	16°	S8E	3608.19'	690.62'	617.25	330.17

02/07/83 4429' (679'), drlg. Mancos "B". Dust 190#. Drld to 4101'. Unable to maintain course direction. TOOH to change BHA. New BHA consists of: bit, float sub, 3 pt reamer, monel collar. TIH & resume drlg, varying wt & RPM to control deviation & direction. Top of Mancos "B" @ 3700' MD, 3590' TVD. DW: 11,472. CW: 215,873. DD 10.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
3812'	15°	S11E	3697.80'	715.15'	641.76	334.27
3904'	13-3/4°	S17E	3786.92'	737.91'	663.92	339.79
3965'	12-1/2°	S19E	3846.33'	751.56'	677.09	344.07
4026'	11-3/4°	S23E	3905.97'	764.56'	689.06	348.66
4056'	11-1/2°	S22E	3935.35'	770.59'	694.64	350.98
4086'	11-1/4°	S27E	3964.76'	776.48'	700.03	353.43
4140'	11-1/4°	S27E	4017.73'	786.91'	709.41	358.21
4200'	12°	S30E	4076.50'	798.82'	720.04	363.98

WELL NAME:	Grynberg Federal #1	PTD:	5970'
AREA:	San Arroyo	ELEVATIONS:	7020' GL, 7034' KB
LOCATION:	Section 28, T16S-R25E	CONTRACTOR:	CRC #75
COUNTY:	Grand	AFE NUMBER:	800842
STATE:	Utah	LSE NUMBER:	90937
FOOTAGE:	1813' FSL, 1412' FWL	TXO WI:	70.3125%

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02/07/83	4261'	13°	S27E	4136.05'	811.84'	731.64	370.28
cont.	4319'	14°	S27E	4192.45'	825.24'	743.70	376.43
	4383'	15°	S29E	4254.41'	841.05'	757.85	383.95

02/08/83 4925' (496'), drlg. Mancos. Dust 200#. Drld to 4460'. Unable to maintain desired course direction. TOOH. PU new bit & BHA. New BHA consists of: bit, float sub, monel collar, 1 DC, 3 pt reamer, 1 DC, 3 pt reamer. TIH w/ new BHA & resume drlg. DW: 9153. CW: 225,026. DD 11.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
4444'	15-3/4°	S28E	4313.23'	856.99'	772.07	391.67
4476'	16°	S29E	4344.01'	865.62'	779.76	395.85
4514'	15-3/4°	S31E	4380.56'	875.81'	788.76	401.04
4581'	12-1/4°	S29E	4445.57'	891.71'	802.80	409.15
4612'	11°	S28E	4475.93'	897.87'	808.29	412.13
4674'	9°	S29E	4536.99'	908.48'	817.75	417.27
4735'	7-3/4°	S26E	4597.34'	917.26'	825.63	421.37
4827'	6-1/2°	S20E	4688.63'	928.64'	836.13	425.83
4920'	5°	S19E	4781.16'	937.35'	844.92	428.94

02/09/83 5522' (597'), drlg. Frontier. Dust 200#. Drld to 5398'. TOOH. LD reamers. PU new bit & TIH w/ slick assembly. Resume drlg. Frontier @ 5375' MD, 5233' TVD. DW: 11,950. CW: 236,976. DD 12.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
5044'	7°	S25E	4904.48'	950.90'	856.94	433.79
5137'	6°	S21E	4996.88'	961.39'	866.63	437.91
5260'	6-3/4°	S22E	5119.12'	975.04'	879.33	442.91
5383'	9-1/2°	S40E	5240.89'	992.02'	894.23	451.87
5434'	10-1/2°	S42E	5291.11'	1000.22'	900.92	457.68

02/10/83 5942' (420'), drlg. Morrison. Dust 200#. Drld to 5870', began taking steady 90' flare. Flare incr to 100' flare @ 5895'. Dakota top @ 5650' MD, 5504' TVD. Buckhorn top @ 5895' MD, 5747' TVD. Morrison top @ 5930' MD, 5781' TVD. DW: 8950. CW: 245,926. DD 13.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
5527'	8-3/4°	S43E	5382.80'	1014.45'	912.38	468.18
5620'	9-1/2°	S35E	5474.63'	1028.29'	923.84	477.46
5711'	8-1/4°	S44E	5564.54'	1041.42'	934.68	486.39
5804'	7-1/2°	S35E	5656.66'	1053.34'	944.51	494.50
5896'	8-1/2°	S39E	5747.76'	1065.49'	954.73	502.20

02/11/83 6030' (88'), RU csg crew. Morrison. Dust 200#. Drld to 6030'. Made 10 stnd short trip. Had 5' of fill. TOOH. RU loggers & log hole. TIH w/ bit, blow hole clean. TOOH. LD DP & DC. RU csg crew. DW: 26,485. CW: 272,411. DD 14.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
6015'	8-1/4°	S45E	5865.50'	1081.42'	967.62	513.80

WELL NAME:	Grynberg Federal #1	PTD:	5970'
AREA:	San Arroyo	ELEVATIONS:	7020' GL, 7034' KB
LOCATION:	Section 28, T16S-R25E	CONTRACTOR:	CRC #75
COUNTY:	Grand	AFE NUMBER:	800842
STATE:	Utah	LSE NUMBER:	90937
FOOTAGE:	1813' FSL, 1412' FWL	TXO WI:	70.3125%

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02/12/83 6030' (0'), RD RT. RR @ 12 midnight 2/11/83. Morrison. Ran 147 jts, 4-1/2", 10.5#, K-55, ST&C. Shoe @ 6003', float @ 5963'. Circ w/ 150 BM for 28 min. Pumped 10 BM flush. Cmtd w/ 150 sxs of Cl "G" w/ 2% gel, 5% KCL, 3/4% D-19, 1/4#/sx gilsonite. PD @ 12:56 PM 2/11/83. BP @ 1200#. Float held. Had returns. Drop from report until completion begins. DW: 70,209. CW: 342,620. DD 15.

02/16/83 5952' PBTD, MIRUCT. Unload & tally tbg. PU 3-7/8" bit, SSN, & csg scraper. TIH w/ 2-3/8", 4.7#, J-55, EUE tbg to PBTD of 5952'. POOH to 5000'. SDFN. Prep to swab FL dn & perf. DW: 36,025. CW: 378,645.

02/17/83 5952' PBTD, swab FL dn to 4700'. RU Dresser. Run GR-CCL correlation log. RIH w/ 3-1/8" csg gun & perf from 5882-99' w/ 1 SPF (5th Dakota) & 5851-72' w/ 1 SPF (4th Dakota). Total of 40 holes, .38" dia. RD Dresser. TIH w/ notched collar, SSN & 178 jts 2-3/8", 4.7#, J-55, EUE tbg. Land tbg @ 5774'. Install blast jt @ surf. ND BOP. NU wellhead. RU swab. SDFN. Roads are very muddy. Have to pull all trucks in. DW: 17,721. CW: 396,366.

02/18/83 5952' PBTD, well dead. IFL @ 4700'. Made 9 swab runs. Swabbed tbg dry. Well open to pit on 3/4" ch w/ 0# FTP, 50# FCP, 5-10' flare, no wtr. RR @ 4 PM on 2/17/83. LOTPON. Prep to acidize this AM. Roads are very muddy. DW: 1630. CW: 397,996.

02/19/83 5952' PBTD, well flowing to pit on 3/4" ch w/ 0# FTP, 400# CP, 25' flare. RU Smith & acidize w/ 25,000 scf N_2 pad, 1500 gal 7-1/2% HCL w/ additives & 750 scf/bbl N_2. Dropped total of 60 ball sealers. MTP 5400#. AIR 8.5 BPM @ 5000#. ISIP 2000#, 5 min 1200#, 10 min 1100#, 15 min 1000#. Good ball action, but did not ball off. HU N_2 to annulus & blew around. Rec ± 80 BF. Put well on 1/2" ch & LOTPON. BLWTBR 36. DW: 11,855. CW: 409,851.

02/20/83 5952' PBTD, well flowing to pit on 1/2" ch w/ 10# FTP, 320# CP, FARO 138 MCFD. Appeared as though well had unloaded some wtr overnight. HU N_2 to annulus & blew around. Unloaded ± 30 BF. Well flowing to pit w/ 20' flare, no wtr, 10# FTP, 100# CP, 1/2" ch, FARO 138 MCFD. Put well on orifice tester. LOTPON. BLWTBR 6. DW: 1000. CW: 410,851.

02/21/83 5952' PBTD, SDFS.

02/22/83 5952' PBTD, well flowing w/ med mist. TP 35#, CP 500#, 20/64" ch, 120 MCFD. DW: 0. CW: 410,851.

02/23/83 5952' PBTD, FTP 160#, FCP 350#, 20/64" ch, 400 MCFD, making heavy mist.

02/24/83 5952' PBTD, FTP 140#, FCP 340#, 20/64" ch, 380 MCFD. Making heavy mist.

02/25/83 5952' PBTD, FTP 133#, FCP 360#, 20/64" ch, 360 MCFD, making heavy mist.

02/26/83 5952' PBTD, pull all equipment into location. RU rig. ND wellhead, NU BOP. TOOH w/ tbg & prep to frac. Roads are very poor. All equipment has to be towed in. DW: 16,141. CW: 426,992.

02/27/83 5952' PBTD, cont moving in frac equipment. All equipment has to be towed in to location. Prep to frac this AM. DW: 0. CW: 426,992.

02/28/83 5952' PBTD, pull all equipment into location. RU Haliburton & frac well dn csg w/ 74,100 gal Versagel 1400, 70 tons Co_2 & 141,000# 20/40

WELL NAME:	Grynberg Federal #1	PTD:	5970'
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COUNTY:	Grand	AFE NUMBER:	800842
STATE:	Utah	LSE NUMBER:	90937
FOOTAGE:	1813' FSL, 1412' FWL	TXO WI:	70.3125%

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02/28/83 cont. sd. Final sd concentrate was 5#/gal. MIR 32.5 BPM @ 2650#. AIR 30 BPM @ 2050#. ISIP 1780#, 5 min 1230#, 10 min 1080#, 15 min 940#. Left well SI for 2-1/2 hrs. Opened well to pit to clean up. LOTPON. Roads are very poor. DW: 77,600. CW: 504,592.

03/01/83 5952' PBTD, well flowed to pit until 9 AM. Well died. TIH w/ notched collar, SSN, & 2-3/8" tbg. Tag sd @ 5664'. POOH 1 stnd. SDFN. Towed pump & tank into location. Prep to circ sd out of csg this AM. Roads are very poor.

03/02/83 5952' PBTD, RU to circ sd out of csg. Circ sd out from 5674-5836'. Lost circ, lost 150 bbls 2% KCL. Well went on vacuum. POOH w/ 2 stnds. LOTPON. Roads are very poor. DW: 3564. CW: 525,956.

03/03/83 5952' PBTD, IFL @ 4500'. Made 7 swab runs. Rec 35 BF. FFL @ 2900'. Fluid is gas cut. LOTPON. Unable to get N_2 truck into location. Will attempt to get N_2 truck into location this AM. Roads are very poor. Took rig crew 6 hrs to get into location. DW: 15,200. CW: 540,800.

03/04/83 5952' PBTD, well dead. Pulled Nowsco & rig crew into location. Got to location @ 10 AM. RU Nowsco & begin cleaning sd out of csg. Wash dn 6 jts. Used 120,000 scf N_2. Well KO @ 1:30 PM. Blew well till 4 PM, heavy fluid & light sd. POOH 5 jts, land tbg @ 5806'. Put well on 1/2" positive choke. LOTPON. Well flowing heavy fluid & light sd, sd decreasing. Roads are very poor. Had to fly crews out in chopper. DW: 8550. CW: 549,350.

03/05/83 5952' PBTD, well flowing to pit w/ 150# FTP, 490# CP through a 1/2" ch bean w/ lite to medium mist. Very little sd coming back. Will flare intermittently. At end of day tbg rose to 180#. Still a very small tr of sd. LOTPON. Roads very poor. DW: 2250. CW: 551,600.

03/06/83 5952' PBTD, well flowing to pit on 1/2" ch to clean up. 200# FTP, 450# CP, lite to med mist. Gas will burn continuously. LOTPON. Roads very poor. DW: 750. CW: 552,350.

03/07/83 5952' PBTD, well flowing to pit on 1/2" ch to clean up. 220# FTP, 420# CP, lite mist. Gas will burn continuously. FARO 1465 MCFD. LOTPON. Roads very poor. DW: 0. CW: 552,350.

03/08/83 5952' PBTD, well flowing to pit on 1/2" choke, 220# FTP, 400# CP, lite mist, FARO 1465 MCFD. No sand. Installed 3/8" choke, 358# FTP, 440# CP, well stab for 2 hrs. FARO 1265 MCFD, lite mist. SIFN. Prep to land tbg & NU wellhead this AM. Roads are very poor. Have to fly crews in & out. DW: 750. CW: 553,100.

03/09/83 5952' PBTD, SITP 720#, SICP 720#. Blew well dn & RIH w/ tbg. Tag sd @ 5900'. POOH & land tbg @ 5816'. ND BOP. NU wellhead. SI & WOPL. SI Dakota gas well. Drop from report until first sales. Open perfs: 5851-72' & 5882-99'. Tbg detail: Size 2-3/8", Wt 4.7#, Grade J-55, No jts 179, landed @ 5816'. DW: 2550. CW: 555,650.

WELL NAME:	Grynberg Federal #1	PTD:	5970'
AREA:	San Arroyo	ELEVATIONS:	7020' GL, 7034' KB
LOCATION:	Section 28, T16S-R25E	CONTRACTOR:	CRC #75
COUNTY:	Grand	AFE NUMBER:	800842
STATE:	Utah	LSE NUMBER:	90937
FOOTAGE:	1813' FSL, 1412' FWL	TXO WI:	70.3125%

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01/29/83 327' (327'), cmtg 9-5/8" csg. Mesaverde. Air mist 150#. Spud 12-1/4" hole @ 12:30 PM 1/28/83. Hole tight to 327'. TD 12-1/4" hole @ midnight 1/28/83. Blow hole. TOOH. TIH. 5' of fill. Blow hole. TOOH. Run 8 jts 9-5/8", 36#, K-55. Float @ 280' KB. Shoe @ 320' KB. Hole had 19' fill. Couldn't circ out. Currently cmtg surf pipe. 1-1/4° @ 327'. DW: 30,851. CW: 30,851. DD 1.

01/30/83 327' (0'), drill out cmt shoe. Mesaverde. Dust 125#. Pump 32 BW. Cmt w/ 100 sxs 50/50 poz w/ 2% gel & 2% $CaCl_2$. Tail w/ 60 sxs Cl "G" w/ 2% $CaCl_2$ & 3#/sx gilsonite. Dspl w/ 24 bbls KCL wtr. PD @ 7:10 AM 1/29/83. BP to 200#. Float held. Full returns. Bled back 1/2 bbl. DW: 10,519. CW: 41,370. DD 2.

01/31/83 998' (671'), TOOH for dyna-drill. Mesaverde. Mist 175#. Drld to 998'. Misted up hole for dyna-drill run. Made 5 stnd short trip. Had no tight spots or fill. TOOH. RU dyna-drill #1. TIH. Dyna-drill wouldn't drill. TOOH to PU new dyna-drill. 1-1/4° @ 398', 1° @ 494', 3/4° @ 675', 1-1/4° @ 767', 1° @ 890'. DW: 13,894. CW: 55,264. DD 3.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					N	W
982'	3/4°	N 48 W	981.89	-12.23	9.07	11.33

02/01/83 1420' (423'), reaming to btm. Mesaverde. Mist 300#. Drld w/ dyna-drill #2 to 1420'. TOOH. Bit was T-8, B-8, O-1/4. PU new bit, full-gauge near-bit IBS, monel collar, under-gauge IBS, DC, full-gauge IBS. TIH to 1000' & begin reaming to btm. DW: 38,773. CW: 94,037. DD 4.

WELL NAME:	Grynberg Federal #1	PTD:	5970'
AREA:	San Arroyo	ELEVATIONS:	7020' GL, 7034' KB
LOCATION:	Section 28, T16S-R25E	CONTRACTOR:	CRC #75
COUNTY:	Grand	AFE NUMBER:	800842
STATE:	Utah	LSE NUMBER:	90937
FOOTAGE:	1813' FSL, 1412' FWL	TXO WI:	70.3125%

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02/01/83 cont.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES N	S	E	W
1004'	1/4°	N43W	1003.89'	-12.41	9.21			11.47
1034'	1°	S30E	1033.88'	-12.31	9.01			11.73
1064'	2°	S35E	1063.87'	-11.54	8.35			11.31
1095'	3°	S35E	1094.84'	-10.25	7.24			10.53
1127'	4-1/4°	S36E	1126.78'	- 8.31	5.60			9.36
1157'	5-1/2°	S34E	1156.67'	- 5.86	3.51			7.90
1188'	6-3/4°	S34E	1187.49'	- 2.67	0.77			6.05
1218'	8°	S34E	1217.25'	1.05		2.43		3.89
1249'	9-1/4°	S36E	1247.90'	5.51		6.23		1.23
1281'	10-1/4°	S38E	1279.43'	10.66		10.56	2.03	
1312'	11-3/4°	S41E	1309.86'	16.19		15.13	5.80	
1343'	13°	S42E	1340.14'	22.31		20.10	10.20	
1375'	14°	S40E	1371.26'	29.23		25.74	15.10	

02/02/83 2027' (607'), drlg. Buck Tongue. Mist 190#. Fin reaming to btm. Began drlg. Drld to 1829'. Unable to maintain desired angle & direction. TOOH. Move middle & top IBS around. New BHA is: bit, full-gauge near-bit IBS, monel collar, full-gauge IBS, DC, under-gauge IBS. TIH & resume drlg. Varying wt & RPM to maintain angle & direction. Buck Tongue @ 1780'. DW: 16,429. CW: 110,466. DD 5.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES S	E
1459'	16°	S39E	1452.40'	49.56'	42.52	28.93
1520'	16-1/4°	S41E	1511.00'	65.35'	55.49	39.82
1583'	16-3/4°	S41E	1571.40'	81.91'	69.00	51.56
1645'	17°	S41E	1630.73'	98.57'	82.58	63.37
1706'	17°	S40E	1689.07'	115.13'	96.14	74.95
1769'	17-1/4°	S41E	1749.27'	132.36'	110.25	87.00
1829'	17-1/4°	S42E	1806.58'	148.77'	123.57	98.79
1891'	17-1/4°	S41E	1865.79'	165.73'	137.34	110.97
1952'	17-1/4°	S42E	1924.04'	182.41'	150.89	122.95
2014'	17°	S40E	1983.29'	199.30'	164.67	134.33

02/03/83 2530' (503'), WOC. Mancos. Mist 200#. Drld to 2530'. Blew hole. Made 10 stnd short trip. Had 10' of fill. Blew hole. TOOH. RU & ran 58 jts 7", 20#, K-55, ST&C, set @ 2530' KB. FC @ 2485' KB. Cmtd w/ 100 BM, 10 bbls mud flush, 2 BW, 75 sxs 50/50 poz w/ 2% $CaCl_2$, friction reducer, 1/4#/sx celloflake tailed by 175 sxs Cl "G" w/ 2% $CaCl_2$, friction reducer, & 1/4#/sx celloflake. Dspl w/ 102 BW. PD @ 5:17 AM on 2/3/83. BP to 1200#. Float held. Returns to surf. ND BOP & set slips. Castlegate @ 2084', Mancos @ 2300'. DW: 54,842. CW: 165,308.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES S	E
2106'	16-3/4°	S42E	2071.33'	223.78'	184.83	151.85
2198'	16-3/4°	S42E	2159.43'	248.38'	204.53	170.19
2292'	16-1/2°	S42E	2249.50'	273.09'	224.52	188.19
2384'	15-3/4°	S42E	2337.88'	296.57'	243.50	205.29
2506'	15°	S43E	2455.51'	326.18'	267.35	227.14

02/04/83 2620' (90'), drlg. Mancos. Dust 200#. Set slips, NU & test BOP. PU BHA. New BHA is bit, float sub, 3 pt reamer, & monel collar. TIH. Start drlg cmt, pressured up. TOOH. Float was plugged. Cleaned out float sub & TIH. Couldn't circ. TOOH. Float sub was ruined. TIH w/ new float sub & resume drlg. DW: 11,878. CW: 177,186.

WELL NAME:	Grynberg Federal #1	PTD:	5970'
AREA:	San Arroyo	ELEVATIONS:	7020' GL, 7034' KB
LOCATION:	Section 28, T16S-R25E	CONTRACTOR:	CRC #75
COUNTY:	Grand	AFE NUMBER:	800842
STATE:	Utah	LSE NUMBER:	90937
FOOTAGE:	1813' FSL, 1412' FWL	TXO WI:	70.3125%

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02/04/83 cont.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
2600'	15°	S43E	2546.31'	348.36'	285.15	243.73

02/05/83 3032' (412'), drlg w/ dyna-drill. Mancos. Mist 300#. Drld to 2675'. Unable to obtain desired course direction. Misted up hole for dyna-drill run. TOOH. Bit broke off in rotary table @ pin. Unable to get pin out of float sub. WO new float sub. PU bit, new float sub, dyna-drill, 1-1/2° bent sub & TIH. Began drlg w/ dyna-drill. Mancos top @ 2770' MD, 2710' TVD. DW: 13,615. CW: 190,801. DD 8.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
2660'	16°	S47E	2604.13'	362.74'	296.48	255.07
2709'	16-3/4°	S40E	2651.14'	375.28'	306.50	264.58
2741'	17-3/4°	S38E	2681.70'	384.19'	313.88	270.55
2771'	18°	S35E	2710.25'	392.96'	321.28	276.03
2802'	18-1/2°	S32E	2739.69'	402.35'	329.38	281.39
2832'	18-1/4°	S28E	2768.17'	411.62'	337.57	286.12
2863'	18-3/4°	S23E	2797.56'	421.39'	346.44	290.35
2896'	19-1/2°	S22E	2828.74'	432.18'	356.43	294.44
2925'	20°	S20E	2856.04'	441.97'	365.58	298.00
2955'	19-3/4°	S15E	2884.25'	452.17'	375.31	301.07
2985'	20°	S13E	2912.46'	462.33'	385.21	303.53
3017'	19-3/4°	S11E	2942.56'	473.13'	395.85	305.80

02/06/83 3750' (718'), drlg. Mancos. Dust 180#. Drld w/ dyna-drill to 3095'. TOOH. PU new BHA. New BHA consists of: bit, float sub, 3 pt reamer, monel collar, under-gauge IBS, DC & 3 pt reamer. TIH, blow hole dry & resume drlg, varying wt & RPM to control deviation & direction. DW: 13,600. CW: 204,401. DD 9.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
3048'	19-1/4°	S8E	2971.78'	483.35'	406.05	307.50
3133'	19°	S5E	3052.09'	510.56'	433.72	310.66
3193'	19°	S5E	3108.82'	529.54'	453.18	312.36
3285'	19°	S5E	3195.81'	558.63'	483.02	314.97
3471'	19°	S6E	3371.67'	617.57'	543.30	320.77
3656'	16-3/4°	S8E	3547.74'	673.17'	599.66	327.69
3719'	16°	S8E	3608.19'	690.62'	617.25	330.17

02/07/83 4429' (679'), drlg. Mancos "B". Dust 190#. Drld to 4101'. Unable to maintain course direction. TOOH to change BHA. New BHA consists of: bit, float sub, 3 pt reamer, monel collar. TIH & resume drlg, varying wt & RPM to control deviation & direction. Top of Mancos "B" @ 3700' MD, 3590' TVD. DW: 11,472. CW: 215,873. DD 10.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
3812'	15°	S11E	3697.80'	715.15'	641.76	334.27
3904'	13-3/4°	S17E	3786.92'	737.91'	663.92	339.79
3965'	12-1/2°	S19E	3846.33'	751.56'	677.09	344.07
4026'	11-3/4°	S23E	3905.97'	764.56'	689.06	348.66
4056'	11-1/2°	S22E	3935.35'	770.59'	694.64	350.98
4086'	11-1/4°	S27E	3964.76'	776.48'	700.03	353.43
4140'	11-1/4°	S27E	4017.73'	786.91'	709.41	358.21
4200'	12°	S30E	4076.50'	798.82'	720.04	363.98

WELL NAME:	Grynberg Federal #1	PTD:	5970'
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COUNTY:	Grand	AFE NUMBER:	800842
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FOOTAGE:	1813' FSL, 1412' FWL	TXO WI:	70.3125%

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02/07/83 cont.	4261'	13°	S27E	4136.05'	811.84'	731.64	370.28
	4319'	14°	S27E	4192.45'	825.24'	743.70	376.43
	4383'	15°	S29E	4254.41'	841.05'	757.85	383.95

02/08/83 4925' (496'), drlg. Mancos. Dust 200#. Drld to 4460'. Unable to maintain desired course direction. TOOH. PU new bit & BHA. New BHA consists of: bit, float sub, monel collar, 1 DC, 3 pt reamer, 1 DC, 3 pt reamer. TIH w/ new BHA & resume drlg. DW: 9153. CW: 225,026. DD 11.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
4444'	15-3/4°	S28E	4313.23'	856.99'	772.07	391.67
4476'	16°	S29E	4344.01'	865.62'	779.76	395.85
4514'	15-3/4°	S31E	4380.56'	875.81'	788.76	401.04
4581'	12-1/4°	S29E	4445.57'	891.71'	802.80	409.15
4612'	11°	S28E	4475.93'	897.87'	808.29	412.13
4674'	9°	S29E	4536.99'	908.48'	817.75	417.27
4735'	7-3/4°	S26E	4597.34'	917.26'	825.63	421.37
4827'	6-1/2°	S20E	4688.63'	928.64'	836.13	425.83
4920'	5°	S19E	4781.16'	937.35'	844.92	428.94

02/09/83 5522' (597'), drlg. Frontier. Dust 200#. Drld to 5398'. TOOH. LD reamers. PU new bit & TIH w/ slick assembly. Resume drlg. Frontier @ 5375' MD, 5233' TVD. DW: 11,950. CW: 236,976. DD 12.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
5044'	7°	S25E	4904.48'	950.90'	856.94	433.79
5137'	6°	S21E	4996.88'	961.39'	866.63	437.91
5260'	6-3/4°	S22E	5119.12'	975.04'	879.33	442.91
5383'	9-1/2°	S40E	5240.89'	992.02'	894.23	451.87
5434'	10-1/2°	S42E	5291.11'	1000.22'	900.92	457.68

02/10/83 5942' (420'), drlg. Morrison. Dust 200#. Drld to 5870', began taking steady 90' flare. Flare incr to 100' flare @ 5895'. Dakota top @ 5650' MD, 5504' TVD. Buckhorn top @ 5895' MD, 5747' TVD. Morrison top @ 5930' MD, 5781' TVD. DW: 8950. CW: 245,926. DD 13.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
5527'	8-3/4°	S43E	5382.80'	1014.45'	912.38	468.18
5620'	9-1/2°	S35E	5474.63'	1028.29'	923.84	477.46
5711'	8-1/4°	S44E	5564.54'	1041.42'	934.68	486.39
5804'	7-1/2°	S35E	5656.66'	1053.34'	944.51	494.50
5896'	8-1/2°	S39E	5747.76'	1065.49'	954.73	502.20

02/11/83 6030' (88'), RU csg crew. Morrison. Dust 200#. Drld to 6030'. Made 10 stnd short trip. Had 5' of fill. TOOH. RU loggers & log hole. TIH w/ bit, blow hole clean. TOOH. LD DP & DC. RU csg crew. DW: 26,485. CW: 272,411. DD 14.

MD	DEV	COURSE DIRECTION	TVD	VERTICAL SECTION	HORIZONTAL COORDINATES	
					S	E
6015'	8-1/4°	S45E	5865.50'	1081.42'	967.62	513.30

WELL NAME:	Grynberg Federal #1	PTD:	5970'
AREA:	San Arroyo	ELEVATIONS:	7020' GL, 7034' KB
LOCATION:	Section 28, T16S-R25E	CONTRACTOR:	CRC #75
COUNTY:	Grand	AFE NUMBER:	800842
STATE:	Utah	LSE NUMBER:	90937
FOOTAGE:	1813' FSL, 1412' FWL	TXO WI:	70.3125%

****

02/12/83 6030' (0'), RD RT. RR @ 12 midnight 2/11/83. Morrison. Ran 147 jts, 4-1/2", 10.5#, K-55, ST&C. Shoe @ 6003', float @ 5963'. Circ w/ 150 BM for 28 min. Pumped 10 BM flush. Cmtd w/ 150 sxs of Cl "G" w/ 2% gel, 5% KCL, 3/4% D-19, 1/4#/sx gilsonite. PD @ 12:56 PM 2/11/83. BP @ 1200#. Float held. Had returns. Drop from report until completion begins. DW: 70,209. CW: 342,620. DD 15.

02/16/83 5952' PBTD, MIRUCT. Unload & tally tbg. PU 3-7/8" bit, SSN, & csg scraper. TIH w/ 2-3/8", 4.7#, J-55, EUE tbg to PBTD of 5952'. POOH to 5000'. SDFN. Prep to swab FL dn & perf. DW: 36,025. CW: 378,645.

02/17/83 5952' PBTD, swab FL dn to 4700'. RU Dresser. Run GR-CCL correlation log. RIH w/ 3-1/8" csg gun & perf from 5882-99' w/ 1 SPF (5th Dakota) & 5851-72' w/ 1 SPF (4th Dakota). Total of 40 holes, .38" dia. RD Dresser. TIH w/ notched collar, SSN & 178 jts 2-3/8", 4.7#, J-55, EUE tbg. Land tbg @ 5774'. Install blast jt @ surf. ND BOP. NU wellhead. RU swab. SDFN. Roads are very muddy. Have to pull all trucks in. DW: 17,721. CW: 396,366.

02/18/83 5952' PBTD, well dead. IFL @ 4700'. Made 9 swab runs. Swabbed tbg dry. Well open to pit on 3/4" ch w/ 0# FTP, 50# FCP, 5-10' flare, no wtr. RR @ 4 PM on 2/17/83. LOTPON. Prep to acidize this AM. Roads are very muddy. DW: 1630. CW: 397,996.

02/19/83 5952' PBTD, well flowing to pit on 3/4" ch w/ 0# FTP, 400# CP, 25' flare. RU Smith & acidize w/ 25,000 scf N_2 pad, 1500 gal 7-1/2% HCL w/ additives & 750 scf/bbl N_2. Dropped total of 60 ball sealers. MTP 5400#. AIR 8.5 BPM @ 5000#. ISIP 2000#, 5 min 1200#, 10 min 1100#, 15 min 1000#. Good ball action, but did not ball off. HU N_2 to annulus & blew around. Rec $\pm$ 80 BF. Put well on 1/2" ch & LOTPON. BLWTBR 36. DW: 11,855. CW: 409,851.

02/20/83 5952' PBTD, well flowing to pit on 1/2" ch w/ 10# FTP, 320# CP, FARO 138 MCFD. Appeared as though well had unloaded some wtr overnight. HU N_2 to annulus & blew around. Unloaded $\pm$ 30 BF. Well flowing to pit w/ 20' flare, no wtr, 10# FTP, 100# CP, 1/2" ch, FARO 138 MCFD. Put well on orifice tester. LOTPON. BLWTBR 6. DW: 1000. CW: 410,851.

02/21/83 5952' PBTD, SDFS.

02/22/83 5952' PBTD, well flowing w/ med mist. TP 35#, CP 500#, 20/64" ch, 120 MCFD. DW: 0. CW: 410,851.

02/23/83 5952' PBTD, FTP 160#, FCP 350#, 20/64" ch, 400 MCFD, making heavy mist.

02/24/83 5952' PBTD, FTP 140#, FCP 340#, 20/64" ch, 380 MCFD. Making heavy mist.

02/25/83 5952' PBTD, FTP 133#, FCP 360#, 20/64" ch, 360 MCFD, making heavy mist.

02/26/83 5952' PBTD, pull all equipment into location. RU rig. ND wellhead, NU BOP. TOOH w/ tbg & prep to frac. Roads are very poor. All equipment has to be towed in. DW: 16,141. CW: 426,992.

02/27/83 5952' PBTD, cont moving in frac equipment. All equipment has to be towed in to location. Prep to frac this AM. DW: 0. CW: 426,992.

02/28/83 5952' PBTD, pull all equipment into location. RU Haliburton & frac well dn csg w/ 74,100 gal Versagel 1400, 70 tons Co_2 & 141,000# 20/40

WELL NAME:	Grynberg Federal #1	PTD:	5970'
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LOCATION:	Section 28, T16S-R25E	CONTRACTOR:	CRC #75
COUNTY:	Grand	AFE NUMBER:	800842
STATE:	Utah	LSE NUMBER:	90937
FOOTAGE:	1813' FSL, 1412' FWL	TXO WI:	70.3125%

****

02/28/83 cont. sd. Final sd concentrate was 5#/gal. MIR 32.5 BPM @ 2650#. AIR 30 BPM @ 2050#. ISIP 1780#, 5 min 1230#, 10 min 1080#, 15 min 940#. Left well SI for 2-1/2 hrs. Opened well to pit to clean up. LOTPON. Roads are very poor. DW: 77,600. CW: 504,592.

03/01/83 5952' PBTD, well flowed to pit until 9 AM. Well died. TIH w/ notched collar, SSN, & 2-3/8" tbg. Tag sd @ 5664'. POOH 1 stnd. SDFN. Towed pump & tank into location. Prep to circ sd out of csg this AM. Roads are very poor.

03/02/83 5952' PBTD, RU to circ sd out of csg. Circ sd out from 5674-5836'. Lost circ, lost 150 bbls 2% KCL. Well went on vacuum. POOH w/ 2 stnds. LOTPON. Roads are very poor. DW: 3564. CW: 525,956.

03/03/83 5952' PBTD, IFL @ 4500'. Made 7 swab runs. Rec 35 BF. FFL @ 2900'. Fluid is gas cut. LOTPON. Unable to get N_2 truck into location. Will attempt to get N_2 truck into location this AM. Roads are very poor. Took rig crew 6 hrs to get into location. DW: 15,200. CW: 540,800.

03/04/83 5952' PBTD, well dead. Pulled Nowsco & rig crew into location. Got to location @ 10 AM. RU Nowsco & begin cleaning sd out of csg. Wash dn 6 jts. Used 120,000 scf N_2. Well KO @ 1:30 PM. Blew well till 4 PM, heavy fluid & light sd. POOH 5 jts, land tbg @ 5806'. Put well on 1/2" positive choke. LOTPON. Well flowing heavy fluid & light sd, sd decreasing. Roads are very poor. Had to fly crews out in chopper. DW: 8550. CW: 549,350.

03/05/83 5952' PBTD, well flowing to pit w/ 150# FTP, 490# CP through a 1/2" ch bean w/ lite to medium mist. Very little sd coming back. Will flare intermittently. At end of day tbg rose to 180#. Still a very small tr of sd. LOTPON. Roads very poor. DW: 2250. CW: 551,600.

03/06/83 5952' PBTD, well flowing to pit on 1/2" ch to clean up. 200# FTP, 450# CP, lite to med mist. Gas will burn continuously. LOTPON. Roads very poor. DW: 750. CW: 552,350.

03/07/83 5952' PBTD, well flowing to pit on 1/2" ch to clean up. 220# FTP, 420# CP, lite mist. Gas will burn continuously. FARO 1465 MCFD. LOTPON. Roads very poor. DW: 0. CW: 552,350.

03/08/83 5952' PBTD, well flowing to pit on 1/2" choke, 220# FTP, 400# CP, lite mist, FARO 1465 MCFD. No sand. Installed 3/8" choke, 358# FTP, 440# CP, well stab for 2 hrs. FARO 1265 MCFD, lite mist. SIFN. Prep to land tbg & NU wellhead this AM. Roads are very poor. Have to fly crews in & out. DW: 750. CW: 553,100.

03/09/83 5952' PBTD, SITP 720#, SICP 720#. Blew well dn & RIH w/ tbg. Tag sd @ 5900'. POOH & land tbg @ 5816'. ND BOP. NU wellhead. SI & WOPL. SI Dakota gas well. Drop from report until first sales. Open perfs: 5851-72' & 5882-99'. Tbg detail: Size 2-3/8", Wt 4.7#, Grade J-55, No jts 179, landed @ 5816'. DW: 2550. CW: 555,650.

TXO PRODUCTION CORP.

GRYNBERG FEDERAL #1

SW SW SECTION 28-T16S-R25E

GRAND COUNTY - UTAH

GEOLOGIC REPORT

BY

JOSEPH J. RUNGE

SUMMIT MOUNTAIN GEOLOGY

WELL SUMMARY

OPERATOR:	TXO PRODUCTION CORP.
WELL NAME:	GRYNBERG FEDERAL #1
LOCATION:	SURFACE HOLE 1813' FSL 1412' FWL SW SW SECTION 28-T16S-R25E
	BOTTOM HOLE 800' FSL 1750' FWL SECTION 28-T16S-R25E
AREA:	SAN ARROYO FIELD
STATE:	UTAH
COUNTY:	GRAND
ELEVATION:	KB 7034 GL 7020
SPUD DATE:	JANUARY 28, 1983
COMPLETION DATE:	FEBRUARY 10, 1983
WELLSITE GEOLOGIST:	JOSEPH J RUNGE
CONTRACTOR:	CRC COLORADO WELL RIG #75
COMPANY ENGINEER:	GLEN HODGE
HOLE SIZE:	12¼" to 300'; 8 3/4" to 2530'; 6¼" to TD
CASING SIZE:	9 5/8" to 300'; 7" to 2523'; 4½" to TD
MUD COMPANY:	WESTERN MUD COMPANY: VERNAL UTAH
AIR COMPRESSORS:	MOUNTAIN AIR DRILLING SERVICES
ELECTRIC LOGGING CO.:	GEARHART WELL SERVICES
DIRECTION COMPANY:	DIRECTION INVESTMENT GUIDENCE (DIG)
TYPES OF LOGS:	DIL-GR; CD-SNP-GR-CAL
OBJECTIVES:	DAKOTA AND BUCKHORN SANDS
TOTAL DEPTH:	6012 MD 5834 TVD
STATUS:	RUN 4½" PRODUCTION PIPE THRU DAKOTA SANDS

WELL CHRONOLOGY

1983 DATE	MIDNIGHT DEPTH	FT/ DAY	DAILY OPERATIONS
1-28	-0-	327	Rig up- Spud @ 12:00 pm- Work pipe- Clean hole- Cond hole- Drlg- Lost circ- Survey- POOH
1-29	327	-0-	Short trip- Circ- POOH- Rig up to run csg- Cmt csg- Woc- Nipple up
1-30	327	609	Pres test to 1000#- Pick up BHA- Drlg- Dry hole- Survey
1-31	936	484	Drlg- Short trips- Survey- Change out BHA- Orient tools- Dyna drill bad- TOH- TIH- Survey- Orient tool- Drlg
2-1	1420	429	Round trip- Change BHA- Break circ- Ream from 1000' to bottom- Drlg- Survey- TOH- Change out BHA- Trip in w/D.C.
2-2	1849	681	TIH- Break circ- Drlg- Survey- Blow hole- Short trip- TOH- TD @ 2530- Change out 6¼" Drl Collors
2-3	2530	400	Run csg- Cmt csg- Nipple down- WOC- Nipple up- Nipple down- Change bushings- Nipple up- Pres test BOP & Hydrill to 1000#- Trip in hole- Drlg cmt @ 2460- Bit plugged- TOH
2-4	2930	47	Trip in hole- Round trip (float broke)- Drlg cmt- Dry hole- Survey- Mist up- Blow hole for trip- W/o float sub- Run in hole w/ dyna drill- Drlg- Survey
2-5	2977	509	Drlg- Survey- POOH- RIH w/bit #7- Reaming from 2940-3099- Drlg- Survey
2-6	3486	779	Drlg- Survey- Trip- Laydown BHA- Make up new BHA- TIH w/NB#8- Lengthen blooie line Drlg- survey
2-7	4265	440	Survey- Drlg & Reaming- Drlg- TOH- Ck BOP- TIH w/NB#9- Drlg

2-8	4705	693	Drlg- Survey- TOH- Laydown 2 3pt reamers- Change bit- Repair air line on hydromatic TIH
2-9	5398	383	Drlg- Survey
2-10	5787	243	Drlg- Survey- TD hole @ 6030- Blow hole Short trip 10 stds- TOH for logs- logging

WELL NAME: GRYNBERG FEDERAL #1 LOCATION: GRAND COUNTY - UTAH

COMPANY NAME: TXO PRODUCTION CORP. SECTION: 28-T16S-R25E

BIT #	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS	FT/HR
1	12 1/4"	HUGES	J3	327	287	5 1/2	52.1
2	8 3/4"	HUGES	J3	998	671	19 3/4	33.9
3	8 3/4"	REED	S216J	1420	422	40	35.5
4	8 3/4"	REED	H55IJ	2530	1051	25 1/4	41.6
5	6 1/4"	SMITH	DTJ	2675	145		
6	6 1/4"	SMITH	F2	3095	420	7 1/2	56.0
7	6 1/4"	SMITH	f2	4101	1006	19	52.9
8	6 1/4"	SMITH	FDT	4460	359	10	35.9
9	6 1/4"	SMITH	F2	5398	938	21 1/4	44.1
10	6 1/4"	SMITH	F4	6030	632	25 3/4	24.5

SUMMIT MOUNTAIN GEOLOGY
GRAND JUNCTION, COLO.

BIT RECORD

DIRECTIONAL DATA

DEPTH	DEVIATION	DIRECTION	TVD	DEPTH	DEVIATION	DIRECTION	TVD
398	1 1/4°	N49W	397	2292	10 1/2°	S42E	2249
494	1°	N45W	493	2384	15 3/4°	S42E	2337
617	3/4°	N70W	616	2506	15°	S43E	2455
767	1 1/4°	N37W	766	2600	15°	S43E	2546
890	1°	N62W	899	2660	16°	S47E	2604
982	3/4°	N48W	981	2709	16 3/4°	S40E	2651
1004	1/4°	N43W	1003	2741	17 3/4°	S38E	2681
1034	1°	S30E	1033	2771	18°	S35E	2710
1064	2°	S35E	1063	2802	18 1/2°	S32E	2739
1095	3°	S35E	1094	2832	18 1/4°	S28E	2768
1127	4 1/4°	S36E	1126	2863	18 3/4°	S23E	2798
1157	5 1/2°	S34E	2771	2896	19 1/2°	S22E	2828
1188	6 3/4°	S34E	1187	2925	20°	S20E	2856
1218	8°	S34E	1217	2955	19 3/4°	S15E	2884
1249	9 1/4°	S36E	1247	2985	20°	S13E	2912
1281	10 1/4°	S38E	1279	3017	19 3/4°	S11E	2942
1312	11 3/4°	S41E	1309	3048	19 1/4°	S8E	2971
1343	13°	S42E	1340	3133	19°	S5E	3052
1375	14°	S40E	1371	3193	19°	S5E	3108
1459	16°	S39E	1452	3285	19°	S5E	3195
1520	16 1/4°	S41E	1511	3471	19°	S6E	3371
1583	16 3/4°	S41E	1571	3656	16 3/4°	S8E	3547
1645	17°	S41E	1630	3719	16°	S8E	3608
1706	17°	S40E	1689	3812	15°	S11E	3697
1769	17 1/4°	S41E	1749	3904	13 3/4°	S17E	3786
1829	17 1/4°	S42E	1806	3965	12 1/4°	S19E	3846
1891	17 1/4°	S41E	1865	4026	11 3/4°	S23E	3905
1952	17 1/4°	S42E	1924	4056	11 1/2°	S22E	3935
2014	17°	S40E	1983	4086	11 1/4°	S27E	3964
2106	16 3/4°	S42E	2071	4140	11 1/4°	S27E	4017
2198	16 3/4°	S42E	2159	4200	12°	S30E	4076

DEPTH	DEVIATION	DIRECTION	TVD
4261	13°	S27E	4136
4319	14°	S27E	4192
4383	15°	S29E	4254
4444	15 3/4°	S28E	4313
4476	16°	S29E	4344
4514	15 3/4°	S31E	4380
4581	12 1/4°	S29E	4445
4612	11°	S28E	4475
4675	9°	S29E	4536
4735	7 3/4°	S20E	4597
4827	6 1/2°	S20E	4688
4920	5°	S19E	4781
5044	7°	S25E	4904
5137	6°	S21E	4996
5260	6 3/4°	S22E	5119
5383	9 1/2°	S40E	5240
5434	10 1/2°	S42E	5291
5527	8 3/4°	S43E	5382
5620	9 1/2°	S35E	5474
5711	8 1/4°	S44E	5564
5804	7 1/2°	S35E	5656
5896	8 1/2°	S39E	5747
6015	8 1/4°	S45E	5837

FORMATION TOPS

FORMATION	DRILL TIME	"E" LOG	TVD	DATUM
BUCK TONGUE	1790	1750	1750	+5284
CASTLEGATE	2084	2070	2038	+4996
MANCOS	2300	2300	2250	+4784
MANCOS "B"	2825	2820	2760	+4274
BASE MANCOS "B"	3700	3670	3560	+3474
FRONTIER	5300	5400	5250	+1784
DAKOTA SILT	5650	5664	5518	+1516
2nd Kd SAND	5730	5732	5586	+1448
3rd Kd SAND	5775	5770	5622	+1412
4th Kd SAND	5825	5840	5692	+1342
5th Kd SAND	5865	5880	5732	+1302
BUCKHORN	5895	5906	5754	+1280
MORRISON	5945	5964	5798	+1236

STRUCTURAL COMPARISON TO NEAREST WELLS

FORMATION	TXO PRODUCTION CORP. GRYNBERG FEDERAL #1 SEC. 28-T16S-R25E		TXO PRODUCTION CORP. NICOR FEDERAL #2 SEC. 28-T16S-R25E		TXO PRODUCTION CORP. NICOR FEDERAL #1 SEC. 28-T16S-R25E	
	KB 7034		KB 7034		KB 7134	
BUCK TONGUE	1750	+5284	1659	+5375	1881	+5262
CASTLEGATE	2038	+4996	1915	+5119	2210	+4933
MANCOS	2250	+4784	2126	+4908	2423	+4720
MANCOS "B"	2760	+4274	2666	+4368	2980	+4163
BASE MANCOS "B"	3560	+3474	3480	+3554	3781	+3362
FRONTIER	5250	+1784	5233	+1801	5559	+1584
DAKOTA SILT	5518	+1516	5496	+1538	5826	+1317
2nd Kd SAND	5586	+1448	ABSENT		5940	+1203
3rd Kd SAND	5622	+1412	5615	+1419	ABSENT	
4th Kd SAND	5692	+1342	5643	+1391	5978	+1165
5th Kd SAND	5732	+1302	5677	+1357	6005	+1138
BUCKHORN	5754	+1280	5745	+1289	6071	+1072
MORRISON	5798	+1230	5778	+1256	6086	+1057

Summit Mountain Geology, Inc.
Well Site Geology

COMPANY TXO PRODUCTION CORP.

WELL NAME GRYNBERG FEDERAL #1

LOCATION SW SW SECTION 28-T16S-R25E GRAND COUNTY - UTAH

ZONE OF INTEREST NO. 1

INTERVAL: From 2070 MD 2038 TVD To 2090 MD 2058 TVD

DRILL RATE: Abv 1.0 min/ft Thur 1.5-5 min/ft Below .75 min/ft

FORMATION NAME CASTLEGATE MEMBER

ZONE "E" LOG DEPTH TVD	ZONE "E" LOG DEPTHS	'E' LOG ANALYSIS OhmM	POROSITY N	POROSITY D	% SW	X-PLOT Ø
	LOGGED THRU CASING					
	2070		30			
	75		26			
	80		28			
	85		14			
	90		30			

TYPE SHOW INCREASE : GRADUAL ____ SHARP X SHOW FLUORESENCE IN SAMPLES

SHOW VARIATION WITHIN ZONE: STEADY X ERRATIC ____ INCREASING ____ DECREASING X

FLUORESCENCE: MINERAL ____ EVEN X SPOTTY ____ STREAMING X FLASHING ____ HALEO ____

NONE ____ CUT: NONE ____ SLOW ____

POOR X % in Total Sample 90% POOR X MOD X

FAIR ____ % in Show Lithology 100% FAIR ____ FAST ____

STAIN: NONE ____ POOR ____ FAIR X GOOD X LIVE X DEAD ____ RESIDUE ____ EVEN X

POROSITY: POOR ____ FAIR ____ GOOD X KIND INTERGRANULAR

LITHOLOGY: SS clr s&p vfgr sbrd wsrtd lse

NOTIFIED: JIM WILLIAMS At 8:30 am HRS. DATE 2-3-83

REMARKS: FLUORESENCE MOST NOTEABLE MODERATE YELLOW ORANGE WITH MODERATE TO SLOW STREAMING CUT LIGHT BROWN OIL STAINING NO SHOWS AT BLOOIE LINE

ZONE DESCRIBED BY: JOSEPH J RUNGE

Summit Mountain Geology, Inc.
Well Site Geology

COMPANY TXO PRODUCTION CORP.

WELL NAME GRYNBERG FEDERAL #1

LOCATION SW SW SECTION 28-T16S-R25E GRAND COUNTY - UTAH

ZONE OF INTEREST NO. 2

INTERVAL: From 5734 MD 5586 TVD To 5750 MD 5602 TVD

DRILL RATE: Abv 1.5 min/ft Thur 1.0 min/ft Below 1.5 min/ft

FORMATION NAME DAKOTA MEMBER 2nd SAND

ZONE "E" LOG DEPTH TVD	ZONE "E" LOG DEPTHS		'E' LOG ANALYSIS OhmM	POROSITY N	POROSITY D	% SW	X-PLOT Ø
5586	5734	36	50	9	17	40	8
88	36	38	35	13	13	100	
90	38	40	40	14	10	50	
92	40	42	65	9	14	40	5
94	42	44	60	10	12	40	2
96	44	46	90	10	11	38	1
98	46	48	20	10	11	90	1
5600	48	50	8	14	10	100	

TYPE SHOW INCREASE : GRADUAL X SHARP ____

SHOW VARIATION WITHIN ZONE: STEADY ____ ERRATIC ____ INCREASING ____ DECREASING ____

FLUORESCENCE: MINERAL ____ EVEN ____ SPOTTY ____ STREAMING ____ FLASHING ____ HALEO ____
NONE X CUT: NONE X SLOW ____
POOR ____ % in Total Sample ____ POOR ____ MOD ____
FAIR ____ % in Show Lithology ____ FAIR ____ FAST ____

STAIN: NONE X POOR ____ FAIR ____ GOOD ____ LIVE ____ DEAD ____ RESIDUE ____ EVEN ____

POROSITY: POOR ____ FAIR X GOOD ____ KIND INTERGRANULAR

LITHOLOGY: SS clr vf-fgr sbrd-rd lse

NOTIFIED: HOWARD GORDON At 8:30 am HRS. DATE 2-10-83

REMARKS: NO SHOWS WHILE DRILLING

ZONE DESCRIBED BY: JOSEPH J RUNGE

Summit Mountain Geology, Inc.
Well Site Geology

COMPANY TXO PRODUCTION CORP.

WELL NAME GRYNBERG FEDERAL #1

LOCATION SW SW SECTION 28-T16S-R25E GRAND COUNTY - UTAH

ZONE OF INTEREST NO. 3

INTERVAL: From 5770 MD 5622 TVD To 5800 MD 5650 TVD

DRILL RATE: Abv .75 min/ft Thur 2.0 - 3.0 min/ft Below 2.0 min/ft

FORMATION NAME DAKOTA MEMBER 3rd SAND

ZONE "E"LOG DWPTH TVD	ZONE "E" LOG DEPTHS		'E' LOG ANALYSIS OhmM	POROSITY N	POROSITY D	% SW	X-PLOT Ø
5622	5665	70	20	14	10	60	
27	70	75	70	9	15	40	6
32	75	80	70	10	12	40	2
37	80	85	90	9	18	30	9
42	85	90	60	10	13	40	3
47	90	95	50	10	18	40	8
5650	95	5800	10	19	10	100	

TYPE SHOW INCREASE : GRADUAL X SHARP ____

SHOW VARIATION WITHIN ZONE: STEADY ____ ERRATIC ____ INCREASING ____ DECREASING ____

FLUORESCENCE: MINERAL ____ EVEN ____ SPOTTY ____ STREAMING ____ FLASHING ____ HALEO ____
NONE X
POOR ____ % in Total Sample ____
FAIR ____ % in Show Lithology ____

CUT: NONE X SLOW ____
POOR ____ MOD ____
FAIR ____ FAST ____

STAIN: NONE X POOR ____ FAIR ____ GOOD ____ LIVE ____ DEAD ____ RESIDUE ____ EVEN ____

POROSITY: POOR ____ FAIR X GOOD X KIND INTERGRANULAR

LITHOLOGY: SS clr f-cgr occ mgr sbrd msrtd lse tr coal strngrs

NOTIFIED: HOWARD GORDON At 8:30 am HRS. DATE 2-10-83

REMARKS: 10 SECOND CONNECTION FLARE AT 5790

ZONE DESCRIBED BY: JOSEPH J RUNGE

Summit Mountain Geology, Inc.
Well Site Geology

COMPANY TXO PRODUCTION CORP.

WELL NAME GRYNBERG FEDERAL #1

LOCATION SW SW SECTION 28-T16S-R25E

ZONE OF INTEREST NO. 4

INTERVAL: From 5840 MD 5692 TVD To 5876 MD 5728 TVD

DRILL RATE: Abv 2.0 min/ft Thur .75 - 1.0 min/ft Below 1.5 min/ft

FORMATION NAME DAKOTA MEMBER 4th SAND

ZONE "E" LOG DEPTH TVD	ZONE "E" LOG DEPTHS	'E' LOG ANALYSIS OhmM	POROSITY N	POROSITY D	% SW	X-PLOT Ø
5692	5835 40	10	18	8	80	
97	40 45	4	18	30+	60	WASHED OUT
5702	45 50	2	22	30+	100	"
07	50 55	4	10	30+	80	"
5712	55 60	5	22	20	90	
17	60 65	6	11	30	50	WASHED OUT ?
5722	65 70	3	14	25	70	10
28	70 75	5	16	12	100	

TYPE SHOW INCREASE : GRADUAL ____ SHARP X 30-35 FT FLARE

SHOW VARIATION WITHIN ZONE: STEADY X ERRATIC ____ INCREASING X DECREASING ____

FLUORESCENCE: MINERAL ____ EVEN ____ SPOTTY ____ STREAMING ____ FLASHING ____ HALEO ____
NONE ____ CUT: NONE ____ SLOW ____
POOR ____ % in Total Sample 100% POOR ____ MOD X
FAIR X % in Show Lithology 100% FAIR X FAST X

STAIN: NONE X POOR ____ FAIR ____ GOOD ____ LIVE ____ DEAD ____ RESIDUE ____ EVEN ____

POROSITY: POOR ____ FAIR ____ GOOD X KIND INTERGRANULAR

LITHOLOGY: SS clr f-cgr sbrd wsrtd lse fros

NOTIFIED: HOWARD GORDON At 8:30 am HRS. DATE 2-11-83

REMARKS: 90 FT FLARE WITH COMPRESSORS ENCOUNTERED @ 5865
FLUORESENCE PALE YELLOW WITH MODERATE STREAMING CUTS

ZONE DESCRIBED BY: JOSEPH J RUNGE

Summit Mountain Geology, Inc.
Well Site Geology

COMPANY TXO PRODUCTION CORP.

WELL NAME GRYNBERG FEDERAL #1

LOCATION SW SW SECTION 28-T16S-R25E GRAND COUNTY - UTAH

ZONE OF INTEREST NO. 5

INTERVAL: From 5880 MD 5732 TVD To 5900 MD 5750 TVD

DRILL RATE: Abv .75 min/ft Thur .5 min/ft Below 2.2 min/ft

FORMATION NAME DAKOTA MEMBER 5th SAND (BASAL SAN ARROYO)

ZONE "E" LOG DEPTH TVD	ZONE "E" LOG DEPTHS		'E' LOG ANALYSIS OhmM	POROSITY N	POROSITY D	% SW	X-PLOT Ø	
5732	5880	82	4	16	16	100		
34	82	84	3	16	30	70	14	WASHED OUT ?
36	84	86	4	12	30	100	16	"
38	86	88	5	10	30	100	18	"
40	88	90	5	12	30	60	16	"
42	90	92	5	10	30	80	18	"
44	92	94	5	12	24	80	14	
46	94	96	6	10	30	70	20	
5748	96	98	7	14	14	70		

TYPE SHOW INCREASE : GRADUAL ____ SHARP X 110 FT FLARE W/COMPRESSORS

SHOW VARIATION WITHIN ZONE: STEADY X ERRATIC ____ INCREASING X DECREASING ____

FLUORESCENCE: MINERAL ____ EVEN ____ SPOTTY ____ STREAMING ____ FLASHING ____ HALEO ____

NONE ____ CUT: NONE ____ SLOW ____

POOR ____ % in Total Sample 90% POOR ____ MOD X

FAIR X % in Show Lithology 100% FAIR X FAST ____

STAIN: NONE X POOR ____ FAIR ____ GOOD ____ LIVE ____ DEAD ____ RESIDUE ____ EVEN ____

POROSITY: POOR ____ FAIR ____ GOOD X KIND INTERGRANULAR

LITHOLOGY: SS clr fgr sbrd-rd wsrtd lse

NOTIFIED: HOWARD GORDON At 8:30 am HRS. DATE 2-11-83

REMARKS: FLARE INCREASED TO 110 FT WITH COMPRESSORS ON @ 5890 35-40 FT NATURAL FLOW FLUORESENCE YELLOW-BROWN MODERATE STREAMING CUTS 4-5 MCFD

ZONE DESCRIBED BY: JOSEPH J RUNGE

SAMPLE DESCRIPTION

350-80	SS	50%	clr-s&p f-mgr sbrd frm sl calc
	SH	50%	dkgy blk vmic frm sl calc
380-410	SH	100%	m-dkgy gygrn mic sl calc
410-40	SS	100%	s&p wh f-mgr sbrd frm-fri sl calc
440-70	SS	40%	a/a arg
	SH	60%	m-dkgy vmic sdy frm blky calc
470-500	SS	100%	clr-mlky f-cgr sbang psrtd hd brit
500-30	SH	100%	m-dkgy mic vsdy strngrs calc
530-60	SS	100%	s&p mlky f-mgr sbrd vcalc
560-90	SS	100%	clr mlky vf-mgr sbrd sbang fri calc
590-620	SS	100%	s&p mlky fgr sbrd msrtd fri
620-50	SS	50%	s&p mlky fgr sbang arg
	SH	50%	blk mic sdy frm sl calc
650-80	SH	100%	blk mic sdy frm sl calc
680-710	SH	100%	a/a
710-40	SS	70%	clr s&p f-mgr sbrd lse
	SH	30%	blk vmic sdy strngrs sl calc
740-70	SS	100%	clr s&p f-mgr occ cgr lse
770-800	SH	100%	dk-mgy carb mic sdy frm blky
800-30	SS	100%	clr fgr sbrd vcalc
830-60	SS	100%	clr s&p f-mgr sbrd wsrtd lse-clus
860-90	SS	100%	a/a
890-920	SH	100%	dkgy blk vmic sdy stngrs frm blky
920-50	SS	100%	s&p wh fgr sbang lse
950-80	SS	100%	clr-mlky mgr sbrd lse clus fri
980-1070	SH	50%	blk dkgy vsdy frm brit calc
	SS	50%	a/a
1070-1100	SH	100%	blk brn mic frm sl calc
1100-30	SS	100%	clr mlky occ s&p fgr sbrd free
1130-60	SH	100%	m-dkgy mic frm calc
1160-90	SH	100%	m-dkgy sdy stngrs frm calc
1190-1220	SH	100%	a/a
1220-50	SS	100%	mlky brn mic vfgr sbrd sl calc
1250-80	SS	100%	mlky brn vf-fgr sbrd occ sbang free-clus
1280-1310	SH	100%	m-dkgy vmic sdy & slty frm sl calc
1310-40	SH	100%	m-dkgy mic slty frm sl calc
1340-70	SS	100%	clr s&p fgr sbrd lse frm
1370-1400	SS	100%	clr-s&p f-mgr sbrd lse fri sl calc
1400-30	SS	60%	a/a bcm arg
	SH	40%	dkgy mic sdy frm sl calc
1430-60	SLTST	100%	brn-gy mic varg sl calc
1460-90	SLTST	100%	gy mic vsdy arg sl calc
1490-1520	SH	100%	dkgy mic vfrm calc
1520-50	SS	100%	clr-mlky f-mgr sbrd-rd vcalc
1550-80	SS	100%	s&p wh mgr sbrd fri
1580-1610	SS	50%	dk-ltgy vf-fgr sbrd fri frm calc
	SH	50%	dkgy blk mic sdy frm calc
1610-40	SS	100%	clr-gy mgr sbrd lse fri

1640-70	SS	100%	a/a
1670-1700	SS	100%	clr-gy f-mgr sbrd lse
1700-30	SS	100%	clr-gy f-mgr sbrd-sbang lse vfri
1730-60	SS	80%	clr s&p sbrd frm-fri sl calc
	SH	20%	dkgy blk mic vsdy carb ip frm brit
1760-90	SS	80%	gy dkbrn vfgr sbrd vmic frm sl calc
	SH	20%	dkgy vmic sdy frm v calc
1790-1820	SS	90%	clr f-mgr sbrd-sbang lse
	SH	10%	dkgy mic sdy & slty frm sl calc
1820-50	SH	100%	dkgy vmic occ vslty frm blky calc
1850-80	SH	100%	dkgy blk mic slty frm blky calc
1880-1910	SS	70%	gy-mlky vf-fgr sbrd fri clus
	SH	30%	mgy mic vsdy & slty frm calc
1910-40	SLTST	100%	m-dkgy mic intrbd w/sd frm calc
1940-70	SLTST	100%	a/a
1970-2000	SH	100%	dkgy blk mic slty frm calc
2000-30	SH	100%	dkgy mic sdy frm blky calc
2030-60	SH	100%	dkgy vmic sdy frm blky calc
2060-90	SS	80%	clr s&p vfgr sbrd wsrtd lse trs cht MOD YEL ORNG FLUO MOD YEL CUT
2090-2120	SS	80%	clr-s&p vfgr sbrd wsrtd lse clus frm YEL BRN FLUO SLOW-FAST CUT LT BRN STNG
	SH	20%	dkgy vmic frm sl calc
2120-50	SS	100%	s&p blk fgr sbrd occ arg strngrs lse YEL FLUO SLOW STRMG CUT TR LT BRN STN
2150-80	SS	50%	dkgy s&p vf-fgr sbrd frm
	SH	50%	blk dkgy mic vsdy frm blky sl calc
2180-2210	SH	70%	blk dkgy vmic sdy frm blky calc
	SS	30%	gy s&p vfgr grdg to sltst frm hd sl calc
2210-40	SH	100%	m-dkgy mic slty sdy frm blky calc
2240-70	SH	100%	m-dkgy mic vsdy slty frm blky sl calc
	SS	TR	clr s&p vfgr sbrd wsrtd fri
2270-2300	SH	100%	m-dkgy vmic sdy frm blky sl calc
2300-30	SH	100%	m-dkgy vmic sdy blky calc
2330-60	SH	100%	dkgy blk vmic slty frm sl calc
2360-90	SH	100%	dkgy vmic frm sl calc
2390-2510	SH	100%	dkgy mgy vmic frm calc
2510-40	SLTST	100%	dkgy mic varg calc
2540-2770	SH	100%	m-dkgy vmic occ slty frm vblky calc
2770-2800	SH	100%	mgy vmic mott frm calc
2800-30	SH	100%	m-dkgy v mic slty frm calc
2830-60	SH	100%	m-dkgy mic frm sl slty sl calc
2860-90	SH	100%	a/a
2890-2920	SH	100%	m-dkgy mic occ slty frm calc
2920-50	SH	100%	m-dkgy mic sdy strngrs slty frm calc
2950-80	SH	50%	a/a
	SS	50%	gy-blk vfgr sbrd frm varg calc
2980-3010	SH	60%	m-dkgy vmic sdy frm calc
	SS	40%	dk-ltgy vfgr sbrd-sbang occ fgr hd brit
3010-40	SS	100%	ltgy s&p f-mgr sbrd fri hd sl calc
3040-70	SS	100%	ltgy s&p vfgr sbrd fri frm calc
3070-3100	SLTST	100%	ltgy s&p sbrd fri sdy calc

3100-30	SH	20%	dkgy blk mic mott frm vcalc
	SLTST	80%	dkgy ltgy s&p mic occ vf-fgr sbrd fri calc
3130-60	SLTST	100%	clr-gy s&p mic occ sdy vfgr sbrd fri
3160-90	SH	100%	dkgy blk vmic v slty stngrs v calc
3190-3220	SH	100%	dkgy mic slty sdy stngrs frm-hd calc
3220-50	SH	100%	m-dkgy mic occ sdy frm sl calc
3250-80	SH	100%	m-dkgy blk vmic vslty frm-hd sl calc
3280-3310	SH	100%	dkgy blk mic occ slty frm calc
3310-40	SH	100%	dkgy vmic vslty stngrs frm vcalc
3340-70	SH	100%	dkgy mic vslty bcm sdy ip calc
3370-3400	SH	90%	m-ltgy mic frm calc
	SS	10%	s&p ltgy vfgr sbrd-sbang lse
3400-3550	SH	100%	m-dkgy mic occ slt stngr calc
3550-80	SLTST	100%	dkgy mic sbrd varg sl calc
3580-3610	SH	100%	dkgy mic slty frm calc
3610-40	SLTST	100%	s&p ltgy mic sbang lse-frm
3640-70	SLTST	100%	s&p ltgy vmic sbang frm sl calc
3670-3700	SS	100%	clr s&p vf-fgr sbrd-rd lse
3700-90	SH	100%	m-dkgy mic slty stngrs frm sl calc
3790-3820	SLTST	100%	dkgy arg mic frm-hd
3820-50	SH	100%	m-dkgy slty sdy frm calc
3850-80	SH	100%	m-dkgy mic frm sl calc
3880-3910	SH	100%	a/a
3910-40	SS	100%	s&p ltgy sbrd grdg to sltst lse
3940-70	SH	70%	m-dkgy mic sdy frm sl calc
	SS	30%	lt-mgy vfgr sbrd slty arg sl calc
2970-4000	SH	100%	dkgy mic frm calc
4000-30	SH	100%	dkgy mic frm sl calc
4030-60	SH	100%	m-dkgy vmic frm sl calc
4060-90	SLTST	100%	m-ltgy mic sbang sdy frm sl calc
4090-4120	SLTST	100%	m-dkgy mic sbang bcm vsdy frm sl calc
4120-50	SH	100%	m-dkgy mic occ slty frm sl calc
4150-80	SH	100%	a/a
4180-4210	SH	100%	dkgy vmic frm sl calc
4210-40	SH	100%	m-dkgy vmic bcm vslty frm calv
4240-70	SH	100%	a/a slt & sd stngrs frm calc
4270-4300	SH	100%	m-dkgy mic frm sl calc
4300-90	SH	100%	m-dkgy blk vmic frm brit calc
4390-4420	SH	100%	m-dkgy mic occ slty frm calc
4420-50	SH	100%	m-dkgy mic frm sl calc
4450-80	SH	100%	dkgy brn vmic vslty sl calc
4480-4600	SH	100%	m-dkgy brn mic frm
4600-4690	SH	100%	m-dkgy brn mic occ slty frm sl calc
4690-4720	SH	100%	dkgy brn mic vslty stngrs frm calc
4720-50	SH	100%	dkgy brn mic slty strgns frm calc
4750-80	SH	100%	brn mic occ slty frm calc
4780-4810	SLTST	100%	brn sbrd fri lse sl calc
4810-40	SLTST	100%	brn sbrd mic bcm varg sl calc
4840-70	NO SAMPLE		
4870-4990	SH	100%	dkbrn gy mic frm calc
4990-5170	SH	100%	dkbrn gy dkgy v mic occ vslty occ vsdy frm calc

5170-5200	SH	100%	brngy dkgy vmic slty strngrs sl calc
5200-30	SH	100%	dkgy blk mic slty sl calc
5230-60	SH	100%	dkgy blk mic occ slty sl calc
5260-90	SH	100%	dkgy blk vmic banded w/slt stngrs v calc
5290-5320	SH	100%	blk mic stngrs smky gy slt calc
5320-50	SH	30%	blk mic slty frm blky calc
	SS	70%	smky gy vf-fgr sbang sbrd lse
			PALE YEL FLUO NO CUT
5350-80	SS	100%	clr-smky vf-fgr sbrd-sbang grdg to slt lse
5380-5410	SH	100%	dkgy blk occ slty hd blky calc
5410-40	SH	100%	blk mic sdy ip frm blky calc
5440-70	SS	100%	smky clr vfgr sbrd-sbang lse
			TR PALE YEL FLUO TR PALE WH FLUO CUT
5470-5500	SH	100%	blk carb vmic occ v slty frm intrbd w/spr cal
5500-30	SH	100%	blk carb v mic v slty stngrs frm trs spr cal
5530-50	SH	100%	blk carb mic frm calc
5550-60	SH	100%	blk carb mic occ slty frm blky calc
5560-70	SH	100%	blk carb mic frm calc
5570-80	SS	100%	clr smky sbang lse slty ip
5580-90	SH	100%	blk mic frm calc
5590-5600	SLTST	100%	smky sbang lse
5600-10	SH	80%	dkgy blk vmic frm calc
	SS	20%	smky fgr sbang lse
5610-20	SH	50%	blk mic frm calc
	SS	50%	clr smky fgr sbrd lse
5620-30	SS	100%	clr-smky vfgr slty sbang lse qtzic
5630-40	SH	100%	dkgy blk mic frm calc
5640-50	SLTST	100%	clr sbrd lse
5650-60	SLTST	100%	a/a occ sdy
5660-70	SS	100%	clr smky vfgr sbrd lse qtzic
5670-80	SLTST	100%	clr-smky grdg to vfgr ss sbrd lse
5680-90	SLTST	100%	clr-smky grdg to vf-fgr ss sbrd lse
5690-5700	SS	100%	clr vf-fgr rd lse
5700-10	SS	50%	a/a
	SH	50%	blk mic frm calc
5710-20	SS	100%	clr smky vfgr grdg to slt lse
5720-30	NO SAMPLE		
5730-40	SH	100%	blk carb mic frm
5740-50	SS	50%	clr fgr sbrd-rd lse
	SH	50%	blk carb mic frm
5750-60	SS	100%	clr vf-fgr sbrd lse psrtd
5760-70	SS	100%	clr fgr sbrd-rd lse
5770-80	SS	100%	clr vfgr mgr sbrd-sbang lse trs coal
5780-90	SS	90%	clr f-mgr sbrd wsrtd lse
	SH	10%	blk carb mic frm blky calc
5790-5800	NO SAMPLE		
5800-10	SS	100%	clr m-cgr sbrd msrtd lse
	SH	TR	blk carb mic frm calc
5810-20	SH	50%	blk mic blky frm
	SS	50%	clr-smky f-mgr sbang lse
5820-30	SS	90%	clr f-mgr occ cgr sbang lse
	SH	10%	blk mic frm sl calc

5830-40	SS	50%	a/a
	SH	50%	a/a
5840-50	SS	100%	clr fgr sbrd lse
5850-60	SS	100%	clr f-cgr sbrd msrtd fros lse
5860-70	SS	100%	clr fgr sbrd wsrtd fros ip lse
5870-90	SS	100%	clr fgr sbrd-rd wsrtd fros ip lse PALE YEL FLUO MOD STRMG YEL FLUO CUT
5890-5900	SS	100%	clr fgr sbrd-rd wsrtd lse
5900-10	SS	100%	clr f-mgr sbrd fros trs tan cht lse
5910-20	SS	100%	clr cgr wrded wsrtd fros ip free
5920-30	SS	100%	clr m-cgr wrded msrtd fros lse
5930-40	SS	80%	clr m-cgr rded lse
	SH	20%	dkgy pale grn wxy sft calc
5940-50	SS	80%	clr mlky pale grn rded f-mgr lse
	SH	20%	blk-brn pale grn wxy sdy frm-sft v calc
5950-60	SS	100%	clr fgr wrded lse
5960-70	SS	50%	a/a
	SH	50%	brn pale grn mic wxy frm vcalc
5970-80	SH	100	m-dkbrn pale grn mic wxy sft-frm v calc
5980-90	SH	100%	pale grn redbrn mic sdy wxy frm v calc
5990-6000	SS	100%	clr-wh m-cgr ang lse
6000-10	SS	30%	a/a
	SH	70%	varagated mic sdy frm calc
6010-30	SH	100%	m-dkgy blk ltgrn mic frm sdy calc

GEOLOGIC SUMMARY

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ZONES OF INTEREST

The subject well is a directionally drilled hole from the Grynberg location in the SW¼ SW¼ of section 28-T16S-R25E. A total depth of 6012 measured depth was reached which is 5834 true vertical depth.

Lithologic discription of the rock section penetrated in the Grynberg Federal #1 is based on 30 ft samples caught between 350 ft MD to 5500 ft MD. Ten foot samples were caught from 5500 ft to TD (6012).

The sample discriptions contained in the report are based on percentages of rock types within the sample from the measured depth intervals indicated. The attached strip log is an interpretive lithologic log based on the samples, drilling time, and the mechanical logs. Five inch detail strip log is adjusted to "E" Log depths. True vertical depths are indicated under each formation top.

CASTLEGATE (2070-2300 MD 2030-2250 TVD)

The top of the Castlegate sand was encountered at 2070 ft. Thirty feet of good clear to salt and pepper, very fine grained, subrounded, well sorted sand was noted. Along with the sand shows of medium yellow orange fluoresence with slow to fast streaming yellow cuts were noted. Heavy traces of light brown oil staining was also associated with the sands. Since the section was logged thru casing, only the neutron tool was able to give correct porosity readings. From 2080-90 average porosity is 16%. For more information see SHOW REPORT #1.

FRONTIER (5400-5664 MD 5250-5518 TVD)

The Frontier is predominatly dark grey to carbonaceous black shale interbedded with smoky-clear sandstones and siltstones and streaks of sparry calcite. Towards the bottom the section becomes very silty and sandy with an occassional trace of dark brown limestone.

DAKOTA SILT (5664-5710 MD 5518-5562 TVD)

The Dakota Silt in the Grynberg Federal #1 is primarly a clear to smoky, very fine grained, subrounded sand with thin interbeds of smoky siltstone and black carbonaceous shale.

2nd DAKOTA SAND (5732-5750 MD 5586-5602 TVD)

The stratigraphic thickness of the 2nd Dakota Sand was 10 feet,

with a 4 foot shale stringer about midway. The sand consisted of clear, fine grained, subround to round, moderately sorted sand. Average resistivity thru the sand is 40-50 ohmms, with porosities of 11-12%. No shows of hydrocarbons were noted while drilling of the sand. SEE SHOW REPORT #2

3rd DAKOTA SAND (5770-5800 MD 5621-5650 TVD)

The third Dakota Sand has 30 feet of good clean sand. Its lithology is simular to that of the 2nd sand. The sandstone is clear, fine to medium grained, subroun to round, and well sorted, with loose to firm siliceous clay clusters. Visual porosity ranged from very poor to fair, with no fluoresence or stain. There was a slight show of gas on a connection at 5780 and a 30 second flare after a connection at 5815 in the bottom of the sand. Average resistivity thru the sand is 50-60 ohmms with porosities of 12-14%. Water saturations thru the sand average 40%. Reasons for no continous flare are, relative tight sands, clay cement, or low pressured gas. SEE SHOW REPORT #3

4th DAKOTA SAND (5840-5876 MD 5692-5728 TVD)

The fourth Dakota Sand was encountered at 5840 MD. A clear, fine grained, subround loose sand with light yellow fluoresence was noted. The unit is overlain by black silty carbonaceous shales. At 5865 a 90 ft flare was encountered with the air compressors on the line. Natural flow was a 25-30 ft flare. The lithology of the bottom of the formation consisted of fine to coarse grained, subround to round, well sorted sand with pale yellow fluoresence and moderate streaming cuts. No sign of staining was noted.

Visual porosity is very good, especially in the bottom of the sand. The average neutron - density porosities are 16-18% with 3-6 ohmms of resistivity. The reason for the low resistivities are probably due to the clay and thier high bound water content, which is a common cementing agent for the Dakota sandstones. Average water saturations range from 60-80%. The sand is badly washed out so some of the porosities and resistivities may be incorrect.
SEE SHOW REPORT #4

5th DAKOTA SAND (5880-5900 MD 5730-5750 TVD)

The fifth Dakota Sand or Basal San Arroyo Sand was penetrated at 5880 MD. Twenty feet of good clear, fine grained, subround to round, well sorted, loose and clustered sandstone was noted. Traces of clear angular quartz and angular tan chert fragments were also noted. At 5890 an increase in both flare length and pressure were noted (110 ft flare). Resistivities are low as in the 4th sand (4-5 ohmms) but the neutron and density porosities are high 25%. The hole is washed out at the point where the gas enters the bore hole. Water saturations average 80%, but I

believe water free gas can be produced form this section.
SEE SHOW REPORT #5

BUCKHORN (5908-5964 MD 5754-5798 TVD)

The Buckhorn in the Grynberg Federal #1 is very poorly developed or one might say non existant. A few poorly developed sands are noted at 5936-5956 MD. Samples showed poorly sorted fine to coarse grained sand and chert with some frosting and pale green waxy shales. No shows of fluoresence or hydrocarbons were noted.

MORRISON (5964-TD MD 5798-TD TVD)

The Morrison penetration was based on pale green and light red brown waxy varagated claystones in the samples below the base of the Buckhorn sandstone.

I appreciate the opportunity of working for TXO Production on the wellsite supervision for the Grynberg Federal #1. If Summit Mountain Geology can be of any service on additional interpetation or verifaction of data, please call.

JOSEPH J. RUNGE

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: U-13653

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Grynberg Federal

9. WELL NO.: #1

10. FIELD AND POOL, OR WILDCAT: San Arroyo

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Section 28, T16S-R25E

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: TXO PRODUCTION CORP.

3. ADDRESS OF OPERATOR: 1800 Lincoln Center Building, Denver, Colorado 80264

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 1813' FSL & 1412' FWL, Section 28, T16S-R25E
At top prod. interval reported below: 864' FSL & 1910' FWL, Section 28
At total depth: 844' FSL & 1927' FWL, Section 28

14. PERMIT NO.: 43-019-30657 — DATE ISSUED: 10/26/82

12. COUNTY OR PARISH: Grand — 13. STATE: Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
1/28/83	2/10/83	3/7/83	7034' KB	7020'

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
6030' MD, 5880' TVD	5963' MD, 5814' TVD	--	→	All	None

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 5851-5899' MD, 5703-5751' TVD - Dakota

25. WAS DIRECTIONAL SURVEY MADE: Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN: FDC-SNP-GR-Caliper, DIL-GR Sample

27. WAS WELL CORED: No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	320'	12-1/4"	160 sxs	none
7"	20#	2530'	8-3/4"	250 sxs	none
4-1/2"	10.5#	6003'	6-1/4"	150 sxs	none

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	5816'	

31. PERFORATION RECORD (*Interval, size and number*)
5851-72', .38" dia, 22 holes
5882-99', .38" dia, 18 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5851-99'	1500 gal 7-1/2% HCL, 74,100 gal Versagel 1400, 70 tons CO_2 & 141,000# 20/40 sd.

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
	Flowing	SI, WOPL

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
3/7/83	24	3/8"			1265		

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
358#	440#			1265		

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): Vented

TEST WITNESSED BY: Randy Walck

35. LIST OF ATTACHMENTS: Well history, logs, directional survey.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED R. Bruce Wright TITLE Petroleum Engineer DATE 3/7/83

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Buck Tongue	1750'	1730'
Castlegate	2070'	2036'
Mancos	2300'	2257'
Frontier	5400'	5257'
Dakota	5664'	5518'
Morrison	5964'	5815'

U. S. GOVERNMENT PRINTING OFFICE : 1975 O - 574-472

871-233

THE FOLLOWING METERS WILL HAVE CALIBRATION / SETTLEMENT TESTS RUN ON THE DATES INDICATED. STARTING TIME WILL BE 0800 OR AS SPECIFIED BELOW AND AT THE OFFICE OF THE NORTHWEST PIPELINE GRAND JUNCTION DISTRICT YOU WILL BE NOTIFIED SHOULD ANY CHANGES OCCUR IN THIS SCHEDULE. IF YOU HAVE ANY QUESTIONS ABOUT THE SCHEDULE, CONTACT OR WRITE THE DISTRICT OFFICE.

METER CODE	WELL NAME	LOC	RUN	DAY	MO/YR	STARTING TIME
92296018	VALENTINE FEDERAL #3 14S.25E.35	06	12	7	11/85	1000
92122018	ARCO FEDERAL D #1 14S.25E.34	06	12	5	12/85	0900
92129012	VALENTINE FEDERAL #2 14S.25E.34	06	12	5	12/85	0800
92238016	HANCOCK FEDERAL #1X 17S.25E.5	06	12	12	12/85	1300
92246011	HANCOCK FEDERAL #2 17S.25E.2	06	12	12	12/85	1100
92297012	NICOR FEDERAL #2 14S.25E.28	06	12	12	12/85	1000
92299015	GRYNBERG FEDERAL #1 14S.25E.28	06	12	12	12/85	0900
92322017	LAUCK FEDERAL #2 14S.25E.29	06	12	10	12/85	0900

UTAH
NATURAL RESOURCES
Oil, Gas & Mining

355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Ut
84180-1203. ● (801-538-5340)

MONTHLY OIL AND GAS PRODUCTION REPORT

Operator name and address:

● TXO PRODUCTION CORP.
P. O. BOX 2690
CODY WY 82414
ATTN: R. P. MEABON

Utah Account No. N1580

Report Period (Month/Year) 12 / 90

Amended Report ☐

Well Name API Number Entity Location	Producing Zone	Days Oper	Production Volume Oil (BBL)	Gas (MSCF)	Water (BBL)
MOXA FEDERAL A-1 U-24638 4301930792 06730 16S 26E 4	DKTA ✓				
NICOR FED #2 U-13653 4301931020 06731 16S 25E 28	DK-BK ✓				
CREDO FEDERAL 1 U-24638 4301930797 06740 16S 26E 5	BUKHN ✓				
CREDO FEDERAL A-1 U-24638 4301930798 06745 16S 26E 5	DKTA ✓				
HANCOCK FEDERAL 2 U-38720 4301930833 06750 17S 25E 5	DKTA ✓				
BENNION FED. 1 U-24632 4301930893 06760 16S 25E 30	DK-MR ✓				
[illegible]0 FEDERAL H-1 U-012658 4301931002 06765 16S 25E 12	MRSN ✓				
VALENTINE FEDERAL 3 U-38276 4301931009 06770 16S 25E 35	DKTA ✓				
WALL FEDERAL #1 U-24632 4301930838 06771 16S 25E 30	DK-BK ✓			"	
OIL SPRINGS UNIT 5 U-08424-A 4304715930 06775 12S 24E 5	WSTC ✓		→ Need successor to Unit oper. (TXO to marathon)		
OIL SPRINGS UNIT #10 U-08424A 4304731656 06776 12S 24E 5	WSTC ✓				
GRYNBERG FEDERAL #1 U-13653 4301930657 06781 16S 25E 28	DKTA ✓				
BMG FEDERAL #1 U-05015 4301931017 06791 16S 26E 8	BUKHN ✓				
	TOTAL				

Comments (attach separate sheet if necessary) _____

I have reviewed this report and certify the information to be accurate and complete. Date _____

Authorized signature _____ Telephone _____

PLEASE COMPLETE FORMS IN BLACK INK

DOGM - FYI - From Connie Larsen - Tax Commission

Tax Compliance Division

Marathon Oil Company

Findlay, Ohio 45840
Telephone 419/422-2121

January 23, 1991

N1580

TO WHOM IT MAY CONCERN:

Effective immediately after the close of business on December 31, 1990, TXO Production Corporation, taxpayer I.D. 75-1710388, a Delaware Corporation, was merged into Marathon Oil Company, taxpayer I.D. 25-1410539.

Following the merger, all business activity previously conducted by TXO Production Corporation will be conducted by and under the name of Marathon Oil Company.

Marathon Oil Company
Tax Organization

GRL:pah
GRL100T

RECD USTC P.B. FEB 14 1991

Send A copy to DOGM 2-21-91

A subsidiary of USX Corporation

Copy sent to Master Sale Maint

Marathon Oil Company

Rocky Mountain Region
Production United States

P.O. Box 2690
Cody, Wyoming 82414
Telephone 307/587-4961

RECEIVED
JAN 24 1991
DIVISION OF
OIL, GAS & MINING

January 22, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

UTAH DIVISION OF OIL, GAS & MINING
3 Triad Center, Ste. 350
Salt Lake City, UT 84180-1203
Attention: State Director

Re: The Merger of TXO Production Corp. into
Marathon Oil Company

Gentlemen:

As Marathon Oil Company advised in its October 8, 1990 letter, TXO Production Corp., a Delaware corporation ("TXO") was being merged into Marathon Oil Company, an Ohio corporation ("Marathon"), on or before January 1, 1991. As stated in the October letter, before this merger, both TXO and Marathon were subsidiaries of USX Corporation.

Effective January 1, 1991, TXO was merged into Marathon, with Marathon becoming the surviving corporation, as evidenced by the enclosed Certificate of Merger signed by the Secretary of State for the State of Ohio. Due to this statutory merger, by operation of law, Marathon, as the surviving entity, has succeeded to all of the assets, property, rights, privileges, power and authority, and has assumed all obligations and liabilities of TXO which existed on the date of the merger.

Marathon requests that your records and filings be changed to reflect this merger, including making any appropriate change in your operator or ownership records. For the purposes of any change, mailing or notification, please substitute the following address and phone number for TXO:

Marathon Oil Company
Attention: Mr. R. P. Meabon
1501 Stampede Avenue
P. O. Box 2690
Cody, WY 82414
(307) 587-4961

Any bond in the name of TXO should be cancelled and all wells and properties shown on the attached Exhibit "A" should be placed on Marathon's statewide bond for the state of Utah.

Marathon respectfully requests that you acknowledge your receipt of this letter by signing the enclosed duplicate original of this letter in the space provided below, and returning it to me in the self-addressed, stamped envelope provided. Also, please provide Marathon with confirmation of the bond cancellations in accordance with the substitution requested above.

Marathon appreciates your patience and cooperation in this matter, and if Marathon can be of any further assistance, please feel free to contact this office.

Sincerely,

R P Meabon

R. P. Meabon
Regulatory Coordinator
Rocky Mountain Region
Extension 3003

RPM:mh

Attachments

RECEIVED AND ACCEPTED THIS _____ DAY OF _____, 1991, BY:

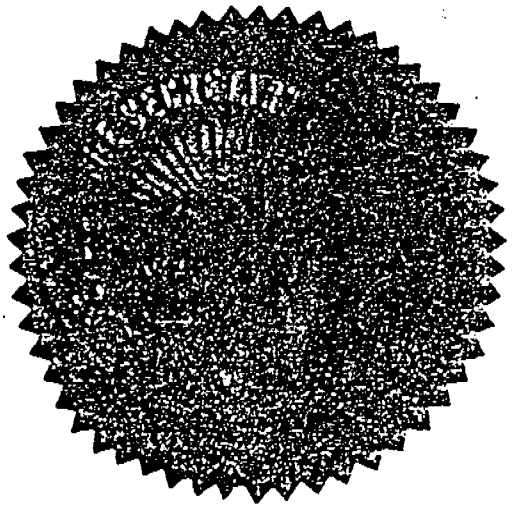
_____
[Governmental Agency or Department]

By_____
Name_____
Its_____
Title

UNITED STATES OF AMERICA,
STATE OF OHIO,
OFFICE OF THE SECRETARY OF STATE.

I, Sherrod Brown

do hereby certify that I am the duly elected, qualified and present acting Secretary of State for the State of Ohio, and as such have custody of the records of Ohio and Foreign corporations; that said records show an AGREEMENT OF MERGER of **MARATHON PETROLEUM COMPANY**, an Ohio corporation, Charter No. 7265, having its principal location in Findlay, County of Hancock, and incorporated on August 1, 1887, and **TXO PRODUCTION CORP.**, a Delaware corporation, having qualified to do business within the State of Ohio on November 2, 1983, under License No. 623328, into **MARATHON OIL COMPANY**, an Ohio corporation, Charter No. 584981, the survivor of said Merger, filed in this office on December 24, 1990, recorded in the Records of Incorporation. Said surviving corporation, **MARATHON OIL COMPANY**, an Ohio corporation, Charter No. 584981, having its principal location in Findlay, County of Hancock, was incorporated on November 18, 1981 and is currently in **GOOD STANDING** upon the records of this office.



WITNESS my hand and official seal at Columbus, Ohio, this 28th *day of* December, *A.D.19* 90

Sherrod Brown

Sherrod Brown
Secretary of State

SEC 3000

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

Routing:

1- LCR	✓
2- DTS	DTS ✓
3- VLC	✓
4- RJF	✓
5- RWM	✓
6- LCR	✓

Attach all documentation received by the division regarding this change.
Initial each listed item when completed. Write N/A if item is not applicable.

XXX Change of Operator (well sold) ☐ Designation of Agent
☐ Designation of Operator ☐ Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 1-1-91)

TO (new operator)	MARATHON OIL COMPANY	FROM (former operator)	TXO PRODUCTION CORP.
(address)	P. O. BOX 2690	(address)	P. O. BOX 2690
	CODY, WY 82414		CODY, WY 82414
	phone (307) 587-4961		phone (307)587-4961
	account no. N 3490		account no. N1580

Well(s) (attach additional page if needed): ***MERGER***

Name: **SEE ATTACHED**	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:

OPERATOR CHANGE DOCUMENTATION

N/A 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). (see documentation)

Lec 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). (Rec. 1-24-91)

N/A 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) ___ If yes, show company file number: ___.

Lec* 4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of Federal and Indian well operator changes should take place prior to completion of steps 5 through 9 below.

Lec 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. (2-26-91)

Lec 6. Cardex file has been updated for each well listed above.

Lec 7. Well file labels have been updated for each well listed above.

Lec 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission.

Lec 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

– OVER –

CHANGE WORKSHEET (CONTINUED) Initial each item when completed. Write N/A if item is not applicable.

ITY REVIEW

LCH 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) ____ (If entity assignments were changed, attach copies of Form 6, Entity Action Form).

N/A 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

ND VERIFICATION (Fee wells only)

N/A 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond. (Federal & State wells only!)

LCH 2. A copy of this form has been placed in the new and former operators' bond files. (upon completion of routing)

LCH 3. The former operator has requested a release of liability from their bond (yes/no) Yes. Today's date February 27, 1991. If yes, division response was made by letter dated March 1, 1991.

ASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

N/A 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated _____ 19___, of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.

DTS 2. Copies of documents have been sent to State Lands for changes involving State leases. Sent 3-5-91

LMING

RWM 1. All attachments to this form have been microfilmed. Date: March 11 1991.

ING

LCH 1. Copies of all attachments to this form have been filed in each well file.

LCH 2. The original of this form and the original attachments have been filed in the Operator Change file.

MMENTS

910204 Bfm/Moab ~~No doc. as of yet.~~ (In the process of changing) Will call when approved.
Bfm/S.L. Book Cliffs Unit, Oil Springs Unit, Marble Mansion Unit (Not approved as of yet)
910204 St. Lands - No documentation as of yet. (Copy hand delivered 2-8-91) LCH
910222 Bfm/S.L. - Approved 2-20-91 - ok for DOGM to recognize eff. date 1-1-91. (T. Thompson)
910226 St. Lands - Needs additional info. "will take 2-3 weeks". (Proceed with change per DTS)

71/34-35

LONE MOUNTAIN PRODUCTION COMPANY
P.O. BOX 3394
408 PETROLEUM BUILDING
BILLINGS, MONTANA 59103-3394
(406) 245-5077
FAX 248-6321

February 22, 1993

State of Utah
Dept. of Natural Resources
Division of Oil, Gas, & Mining
3 Triad Center, Suite 350
Salt Lake City, Utah 84180

Re: Change of Operator
Sundry Notices
Grand and Uintah Counties, Utah

Gentlemen:

Enclosed in triplicate are Sundry Notices for 53 wells located on Federal lands in Utah for which Lone Mountain Production Company is assuming operations effective February 22, 1993. Two separate lists of the wells and lease numbers, by sorted by BLM district, are attached. The wells were all previously operated by Marathon Oil Company. If any further information is needed please advise either me or Joe Dyk in our Grand Junction office.

Very truly yours,

Lone Mountain Production Company

James G. Routson
President

Enclosures

xc: Joe Dyk
Marathon

UTAH FEDERAL WELLS

MOAB BLM DISTRICT

WELL	LEASE NO.	LOCATION
Bookcliffs Unit No. 1	U-036905	SE¼ SE¼ Sec. 32-T18S-R22E
Bookcliffs Unit No. 3	U-036905	Sw¼ NE¼ Sec. 33-T18S-R22E
Hancock Fed. No. 2	U-38720	NW¼ SW¼ Sec. 5-T17S-R25E
Hougen Fed. No. A-1	U-42480	SW¼ SW¼ Sec. 14-T17S-R24E
TXO-POGO-USA No. 15-9	U-49535	NE¼ SE¼ Sec. 15-T17S-R24E
Callister Fed. No. 1	U-38363	NW¼ SE¼ Sec. 24-T16S-R24E
Ptasynski Fed. No. 1	U-24603-A	NE¼ NW¼ Sec. 15-T17S-R23E
Arco Fed. B No. 1	U-9831	SE¼ SE¼ Sec. 6-T16S-R25E
Arco Fed. C No. 1	U-06188-B	NW¼ NW¼ Sec. 35-T16S-R25E
Arco Fed. D No. 1	U-29645	NE¼ SE¼ Sec. 34-T16S-R25E
Arco Fed. H No. 1	U-0126528	NW¼ SW¼ Sec. 12-T16S-R25E
Grynberg Fed. No. 1	U-13653	NE¼ SW¼ Sec. 28-T16S-R25E
Lauck Fed. A No. 1	U-34033	SE¼ SE¼ Sec. 29-T16S-R25E
Lauck Fed. No. 2	U-34033	NW¼ SW¼ Sec. 29-T16S-R25E
Nicor Fed. No. 1	U-31807	NW¼ NE¼ Sec. 28-T16S-R25E
Nicor Fed. No. 2	U-13653	NW¼ NE¼ Sec. ~~33~~ 28 -T16S-R25E
Valentine Fed. No. 1	U-38276	SE¼ SW¼ Sec. 35-T16S-R25E
Valentine Fed. No. 2	U-38276	SE¼ NW¼ Sec. 34-T16S-R25E
Valentine Fed. No. 3	U-38276	SE¼ SW¼ Sec. 35-T16S-R25E
Wall Fed. No. 1	U-24632	NE¼ SW¼ Sec. 30-T16S-R25E
Bennion Fed. No. 1	U-24632	NE¼ NW¼ Sec. 30-T16S-R25E
Harvey Fed. No. 1-X	U-10427	Sw¼ SE¼ Sec. 5-T16S-R25E

UTAH FEDERAL WELLS

MOAB BLM DISTRICT

WELL	LEASE NO.	LOCATION
BMG Fed. No. 1	U-05015	NE¼ NW¼ Sec. 8-T16S-R26E
BMG Fed. No. 2	U-05015	SW¼ SW¼ Sec. 8-T16S-R26E
BMG Fed. No. 3	U-05015-A	SW¼ SW¼ Sec. 8-T16S-R26E
BMG Fed. No. 4	U-05015-A	NW¼ NW¼ Sec. 17-T16S-R26E
BMG Fed. No. 5	U-05015-A	NW¼ SW¼ Sec. 18-T16S-R26E
BMG Fed. No. 7	U-05015-A	NW¼ SE¼ Sec. 17-T16S-R26E
Credo Fed. No. 1	U-24638	NE¼ SE¼ Sec. 5-T16S-R26E
Credo Fed. A No. 1	U-24638	SE¼ NW¼ Sec. 5-T16S-R26E
Moxa Fed. No. 1	U-24638	SW¼ SW¼ Sec. 9-T16S-R26E
Moxa Fed. A No. 1	U-24638	NE¼ SE¼ Sec. 4-T16S-R26E

UTAH FEDERAL WELLS

VERNAL BLM DISTRICT

WELL	LEASE NO.	LOCATION
Shuffleboard Fed. No. 1	U-31255	NE¼ NE¼ Sec. 27-T6S-R21E
Stirrup Fed. No. 28-1	U-34711	NW¼ SW¼ Sec. 28-T6S-R21E
Stirrup Fed. No. 29-2	U-46699	NW¼ SE¼ Sec. 29-T6S-R21E
Stirrup Fed. No. 29-3	U-46699	SE¼ SE¼ Sec. 29-T6S-R21E
Football Fed. No. 29-4	U-46699	SE¼ SW¼ Sec. 29-T6S-R21E
Croquet Fed. No. 1	U-53862	SE¼ NE¼ Sec. 35-T6S-R21E
Croquet Fed. No. 2	U-53862	NE¼ SE¼ Sec. 35-T6S-R21E
Croquet Fed. No. 3	U-53862	NE¼ NW¼ Sec. 35-T6S-R21E
Bridle Fed. No. 1	U-47866	SW¼ SW¼ Sec. 34-T6S-R22E
Bridle Fed. No. 2	U-47866	NE¼ SE¼ Sec. 34-T6S-R22E
Bridle Fed. No. 3	U-47866	SW¼ NW¼ Sec. 34-T6S-R22E
Bridle Fed. No. 4	U-47866	SE¼ NE¼ Sec. 34-T6S-R22E
Cracker Fed. No. 1	U-54197	SE¼ NE¼ Sec. 8-T11S-R23E
Cracker Fed. No. 2	U-54197	SE¼ SE¼ Sec. 8-T11S-R23E
Cracker Fed. No. 3	U-54193	SW¼ SE¼ Sec. 5-T11S-R23E
Cracker Fed. No. 4	U-54196	SE¼ NE¼ Sec. 7-T11S-R23E
Marble Mansion Unit #1	U-54201	SE¼ SE¼ Sec. 18-T11S-R23E
Wells Fed. A No. 1	U-54198	SW¼ SE¼ Sec. 12-T11S-R23E
Oil Springs Unit #5	U-08424-A	NE¼ SW¼ Sec. 5-T12S-R24E
Oil Springs Unit #7	U-08424-A	SE¼ SW¼ Sec. 4-T12S-R24E
Oil Springs Unit #10	U-08424-A	NE¼ NE¼ Sec. 5-T12S-R24E

UTAH STATE WELLS

WELL	LEASE NO.	LOCATION
Texas Pacific No. 1	ML-4468-A	NW¼ SE¼ Sec. 36-T16S-R25E Grand County
Texas Pacific No. 2	ML-4468-A	SW¼ SW¼ Sec. 36-T16S-R25E Grand County
Little Berry No. 1	ML-21061	SW¼ SW¼ Sec. 2-T16S-R23E Grand County
Evacuation Creek No. 1	ML-39868	SE¼ SW¼ Sec. 36.T11S-R25E Uintah County
Evacuation Creek A No. 1	ML-28043	NE¼ NE¼ Sec. 2-T12S-R25E Uintah County
Evacuation Creek 23-2-1	ML-28043	NE¼ SW¼ Sec. 2-T12S-R25E Uintah County
Stirrup No. 32-1	ML-22036	NW¼ NE¼ Sec. 32.T6S-R21E Uintah County
Stirrup No. 32-2	ML-22036	SE¼ NE¼ Sec. 32.T6S-R21E Uintah County
Stirrup No. 32-4	ML-22036	NW¼ NE¼ Sec. 32.T6S-R21E Uintah County

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

RECEIVED
FEB 25 1993
DIVISION OF
OIL GAS & MINING

5. Lease Designation and Serial No.: U-13653

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.: Grynberg Fed. No. 1

2. Name of Operator: Lone Mountain Production Company

9. API Well No.: 43-019-30657

3. Address and Telephone No.: P.O. Box 3394, Billings, MT 59103

10. Field and Pool, or Exploratory Area: San Arroyo

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1813' FSL, 1412' FWL, Sec. 28-T16S-R25E
(NE¼ SW¼)

11. County or Parish, State: Grand County, Utah

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other Change of Operator	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Lone Mountain Production Company has assumed operations of the above referenced well effective February 22, 1993. The former operator was Marathon Oil Company.

Bond Coverage is provided by Lone Mountain's Statewide Oil & Gas BLM Bond No. UT0719.

Field Operations will be handled by our Grand Junction office.

14. I hereby certify that the foregoing is true and correct

Signed [signature] Title Petroleum Engineer Date Feb. 22, 1993

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

FORM 9

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION & SERIAL NO.: See Below

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1. OIL WELL ☐ GAS WELL ☐ OTHER

RECEIVED
FEB 25 1993
DIVISION OF OIL GAS & MINING

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Marathon Oil Company

8. FARM OR LEASE NAME: See Below

3. ADDRESS OF OPERATOR: P.O. Box 2690, Cody, Wyoming 82414

9. WELL NO.: See Below

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface
At proposed prod. zone: See Below

10. FIELD AND POOL, OR WILDCAT: See Below

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: See Below

14. API NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.)	12. COUNTY	13. STATE
See Below		Grand and Uintah	Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐				
(Other)				(Other)			

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

APPROX. DATE WORK WILL START _____

DATE OF COMPLETION _____

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

* Must be accompanied by a cement verification report.

On 2/22/93 with an effective date of October 1, 1992, Marathon Oil Company sold all of its rights, title and interests shown on Exhibit 'A' and 'B' to:

Lone Mountain Production Company
P.O. Box 3394, 408 Production Building
Billings, Montana 59103-3394

By copy of this sundry notice to Lone Mountain Production Company, Marathon is advising that Lone Mountain Production Company is resposible for operating these leases and wells within the federal and state rules and regulations.

Utah O&G--cc: WRF,RDS,CLB,RPM,KJI,TITLE AND CONTR(HOU),ACCTG.,CFR,LONE MTN. PROD.

18. I hereby certify that the foregoing is true and correct

SIGNED R.P. Meabon RPMeabon TITLE Regulatory Coordinator DATE 2/23/93

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

See Instructions On Reverse Side

(3/89)

List of Properties sold by Marathon Oil Company to Lone Mountain Production Company, P.O. Box 3394, 408 Petroleum Building, Billings, Montana 59103-3394

WELL	LOCATION	LEASE	API #
North Horse Point Field			
Little Berry State #1	SW/4 SW/4,Sec. 2-16S-23E	ML-21061	043-019-31075
BAR X West Field			
Hancock Federal #2	NW/4 SW/4,Sec. 5-17S-25E	U-38720	043-019-30833
Bryson Canyon Field			
Hougen Federal A#1- St #1	SW/4 SW/4 Sec.14-17S-24E	U-42480	043-019-30799
TXO Pogo USA #19-9	NE/4 SE/4,Sec. 15-17S-24E	U-49535	043-019-30779
East Canyon Field			
Callister Federal #1	NW/4 SE/4 Sec. 24-16S-24E	U-38363	043-019-30857
Ptasynski Federal #1	NE/4 NW/4 Sec. 15-17S-23E	U-24603-A	043-019-30780
Horseshoe Bend Field			
Bridle Federal #1	SW/4 SW/4 Sec. 34-6S-22E	U-47866	043-047-31533
Bridle Federal #2	NE/4 SE/4 Sec. 34-6S-22E	U-47866	043-047-31655
Bridle Federal #3	SE/4 NE/4 Sec. 34-6S-22E	U-47866	043-047-31678
Bridle Federal #4	SE/4 NE/4 Sec. 34-6S-22E	U-47866	043-047-31866
Croquet Federal #1	SE/4 NE/4 Sec. 35-6S-21E	U-53862	043-047-31440
Croquet Federal #2	NE/4 SE/4 Sec. 35-6S-21E	U-53862	043-047-31672
Croquet Federal #3	NE/4 NW/4 Sec. 35-6S-21E	U-53862	043-047-31867
Football Fed #29-4	SE/4 SW/4 Sec. 29-6S-21E	U-46699	043-047-31883
Shuffleboard Fed #1	NE/4 NE/4 Sec. 27-6S-21E	U-31255	043-047-31668
Stirrup Fed. #28-1	NW/4 SW/4 Sec. 28-6S-21E	U-34711	043-047-31571
Stirrup Fed. #29-2	NW/4 SE/4 Sec. 29-6S-21E	U-46699	043-047-31508
Stirrup Fed. #29-3	SE/4 SE/4 Sec. 29-6S-21E	U-46699	043-047-31634
Stirrup State #32-1	NW/4 NE/4 Sec. 32-6S-21E	ML-22036	043-047-31557
Stirrup State #32-2	SE/4 NE/4 Sec. 32-6S-21E	ML-22036	043-047-31626
Stirrup State #32-4	NW/4 NE/4 Sec. 32-6S-21E	ML-22036	043-047-31648
Rockhouse Field			
Cracker Fed. #1	SE/4 NE/4 Sec. 8-11S-23E	U-54197	043-047-31532
Cracker Fed. #2	SE/4 SE/4 Sec. 8-11S-23E	U-54197	043-047-31690
Cracker Fed. #3	SW/4 SE/4 Sec. 5-11S-23E	U-54193	043-047-31689
Cracker Fed. #4	SE/4 NE/4 Sec. 7-11S-23E	U-54196	043-047-31748
Marble Mansion #1	SE/4 SE/4 Sec. 18-11S-23E	U-54201	043-047-31865
Wells Fed. A #1	SW/4 SE/4 Sec. 12-11S-23E	U-54198	043-047-31603

San Arroyo Field

Arco Fed. B #1	SE/4 SE/4 Sec. 6-16S-25E	U-9831	043-019-30552
Arco Fed. C #1	NW/4 NW/4 Sec. 35-16S-25E	U-06188-B	043-019-30572
Arco Fed. D #1	NE/4 SE/4 Sec. 34-16S-25E	U-29645	043-019-30578
Arco Fed. H #1	NW/4 SW/4 Sec. 12-16S-25E	U-0126528	043-019-31002
Bennion Fed. #1	NE/4 NW/4 Sec. 30-16S-25E	U-24632	043-019-30893
BMG Fed. #1	NE/4 NW/4 Sec. 8-16S-26E	U-05015	043-019-31017
BMG Fed. #2	SW/4 SW/4 Sec. 8-16S-26E	U-05015	043-019-31108
BMG Fed. #3	SW/4 SW/4 Sec. 8-16S-26E	U-05015-A	043-019-31114
BMG Fed. #4	NW/4 NW/4 Sec. 17-16S-26E	U-05015-A	043-019-31130
BMG Fed. #5	NW/4 SW/4 Sec. 8 -16S-26E	U-05015-A	043-019-31131
BMG Fed. #7	NW/4 SE/4 Sec. 17-16S-26E	U-05015-A	043-019-31183
Bookcliffs #1	SE/4 SE/4 Sec. 32-18S-22E	U-036905	043-019-15410
Bookcliffs #3	SW/4 NE/4 Sec. 33-18S-22E	U-036905	043-019-15411
Credo Fed. #1	NE/4 SE/4 Sec. 5-16S-26E	U-24638	043-019-30797
Credo Fed. A #1	SE/4 NW/4 Sec. 5-16S-26E	U-24638	043-019-30798
Grynberg Fed. #1	NE/4 SW/4 Sec. 28-16S-25E	U-13653	043-019-30657
Harvey Fed. #1-X	SW/4 SE/4 Sec. 5-16S-25E	U-10427	043-019-30574
Lauck Fed. A #1	SE/4 SE/4 Sec. 29-16S-25E	U-34033	043-019-30990
Lauck Fed. #2	NW/4 SW/4 Sec. 29-16S-25E	U-34033	043-019-31109
Moxa Fed. #1	SW/4 SW/4 Sec. 9-16S-26E	U-24638	043-019-30698
Moxa Fed. A #1	NE/4 SE/4 Sec. 4 16S-26E	U-24638	043-019-30792
Nicor Fed. #1	NW/4 NE/4 Sec. 28-16S-25E	U-31807	043-019-30656
Nicor Fed. #2	NW/4 NE/4 Sec. 33-16S-25E	U-13653	043-019-31020
Texas Pac St #1	NW/4 SE/4 Sec. 36-16S-25E	ML-4468-A	043-019-30634
Texas Pac St #2	SW/4 SW/4 Sec. 36-16S-25E	ML-4468-A	043-019-30670
Valentine Fed. #1	SE/4 SW/4 Sec. 35-16S-25E	U-38276	043-019-30639
Valentine Fed. #2	SE/4 NW/4 Sec. 34-16S-25E	U-38276	043-019-30640
Valentine Fed. #3	SE/4 SW/4 Sec. 35-16S-25E	U-38276	043-019-31009
Wall Fed. #1	NE/4 SW/4 Sec. 30-16S-25E	U-24632	043-019-30838

Oil Springs Field

Oil Springs #5	NE/4 SW/4 Sec. 5-12S-24E	U-08424-A	043-047-15930
Oil Springs #7	SE/4 SW/4 Sec. 4-12S-24E	U-08424-A	043-047-31248
Oil Springs #10	NE/4 NE/4 Sec. 5-12S-24E	U-08424-A	043-047-31656

Evacuation Creek Field

Evacuation Creek State A #1	NE/4 NE/4 Sec. 2-12S-25E	ML-28043	043-047-31674
Evacuation Cr.#23-2-1	NE/4 SW/4 Sec. 2-12S-25E	ML-28043	043-047-15675
Evacuation Creek State #1	SE/4 SW/4 Sec. 36-11S-25E	ML-39868	043-047-31307

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

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Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: U-13653

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.: Grynberg Fed. No. 1

2. Name of Operator: Lone Mountain Production Company

9. API Well No.: 43-019-30657

3. Address and Telephone No.: P.O. Box 3394, Billings, MT 59103

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4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 1813' FSL, 1412' FWL, Sec. 28-T16S-R25E (NE¼ SW¼)

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☒ Subsequent Report	☐ Recompletion	☐ New Construction
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Bond Coverage is provided by Lone Mountain's Statewide Oil & Gas BLM Bond No. UT0719.

Field Operations will be handled by our Grand Junction office.

RECEIVED
MAR 15 1993
DIVISION OF
OIL GAS & MINING

14. I hereby certify that the foregoing is true and correct

Signed: James Routson — Title: ACTING Petroleum Engineer — Date: Feb. 22, 1993

(This space for Federal or State office use)

Approved by: /s/ Brent Northrup — Title: _____ — Date: MAR 10 1993

Conditions of approval, if any:

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

Dogm

Lone Mountain Production Company
Well No. Grynberg Fed. 1
NESW Sec. 28, T. 16 S., R. 25 E.
Grand County, Utah
Lease U-13653

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Lone Mountain Production Company is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by UT0719 (Principal - Lone Mountain Production Company) via surety consent as provided for in 43 CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

Routing:

1-LEC	7-LEC
2-DTS/SLS	
3-VLC	✓
4-RJF	✓
5-RWM	✓
6-ADA	✓

Attach all documentation received by the division regarding this change.
Initial each listed item when completed. Write N/A if item is not applicable.

☒ Change of Operator (well sold) ☐ Designation of Agent
☐ Designation of Operator ☐ Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 2-22-93)

TO (new operator) LONE MTN PRODUCTION CO
(address) PO BOX 3394
BILLINGS MT 59103-3394

phone (406) 245-5077
account no. N 7210

FROM (former operator) MARATHON OIL COMPANY
(address) PO BOX 2690
CODY WY 82414

phone (307) 587-4961
account no. N 3490

Well(s) (attach additional page if needed):

Name: **SEE ATTACHED**	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:

OPERATOR CHANGE DOCUMENTATION

Lec 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). (Rec'd 2-25-93)

Lec 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). (Rec'd 2-25-93)

N/A 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) _____ If yes, show company file number: _____.

Lec 4. **(For Indian and Federal Wells ONLY)** The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of **Federal and Indian** well operator changes should take place prior to completion of steps 5 through 9 below.

Lec 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. (3-16-93)

Lec 6. Cardex file has been updated for each well listed above. (3-16-93)

Lec 7. Well file labels have been updated for each well listed above. (3-16-93)

Lec 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission. (3-16-93)

Lec 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

- OVER -

ERATOR CHANGE WORKSHEET (CONTINUED) Initi[redacted]each item when completed. Write N/A i[redacted]item is not applicable.

TITY REVIEW

lec 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) ____ (If entity assignments were changed, attach copies of Form 6, Entity Action Form).

N/A 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

ND VERIFICATION (Fee wells only)

N/A 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.

N/A 2. A copy of this form has been placed in the new and former operators' bond files.

N/A 3. The former operator has requested a release of liability from their bond (yes/no) ___. Today's date _____ 19___. If yes, division response was made by letter dated _____ 19___.

lec

ASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

N/A 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated _____ 19___, of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.

STS 2. Copies of documents have been sent to State Lands for changes involving State leases.
3/17/93 to Sal Banner

LMING

lec 1. All attachments to this form have been microfilmed. Date: March 25 1993.

LING

lec 1. Copies of all attachments to this form have been filed in each well file.

lec 2. The original of this form and the original attachments have been filed in the Operator Change file.

MMENTS

930316 Bfm/Moab Approved 3-16-93 eff. 2-22-93.
(Other wells will be handled on a separate change - partial change only!)
St. Lease wells also being chg'd at this time.

E71/34-35

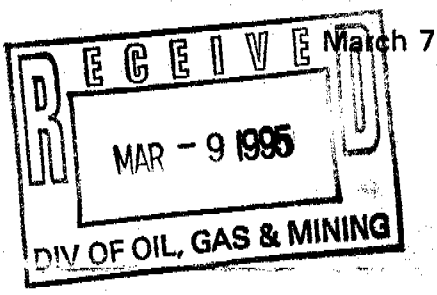
United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
UT-922

March 7, 1995



43-019-30657
Graynberg Fed. #1
Sec. 28, T. 16S, R. 25E.
Grand County Ut.

Lone Mountain Production Company
P.O. Box 3394
Billings, Montana 59103-3394

Gentlemen:

Enclosed is one approved copy of Communitization Agreement No. UTU73963. This agreement communitizes all rights as to natural gas and associated liquid hydrocarbons producible from the Dakota and Morrison Formations, covering the W½ of Section 28, Township 16 South, Range 25 East, SLB&M, Grand County, Utah. This agreement conforms with the spacing set forth in Order No. 149-3B which was issued by the State of Utah, Board of Oil, Gas and Mining on May 28, 1980.

This agreement is effective as of March 7, 1983. The communitized area covers 320.00 acres and includes portions of Federal oil and gas leases U-31807, U-34033 and U-73968.

Approval of this agreement does not warrant or certify that the operator thereof and other holders of operating rights hold legal or equitable title to those rights in the subject leases which are committed hereto.

Minerals Management Service Form MMS-3160, "Monthly Report of Operations", must be submitted for this agreement beginning with the month in which drilling operations commence. Form MMS-3160 is to be mailed to the Minerals Management Service, Production Accounting Division, P. O. Box 17110, Denver, Colorado 80217.

If this well is producing, this approval requires the submission of a Payor Information Form MMS-4025 to the Minerals Management Service (MMS) within 30 days (30 CFR 210.51). Please notify the designated payor or payors (purchasers, working interest owners, or others) as soon as possible regarding this requirement. Any production royalties that are due must be reported and paid within 90 days of the Bureau of Land Management's approval date or the payors will be assessed interest for late payment under the Federal Oil and Gas Royalty Management Act of 1982 (See 30 CFR 218.54). If you need assistance or clarification, please contact the Minerals Management Service at 1-800-525-9167 or 303-231-3504.

Please furnish all interested principals with necessary evidence of this approval.

Sincerely,

/s/ Robert A. Henricks

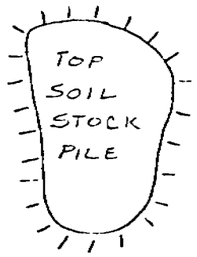
Robert A. Henricks
Chief, Branch of Fluid Minerals

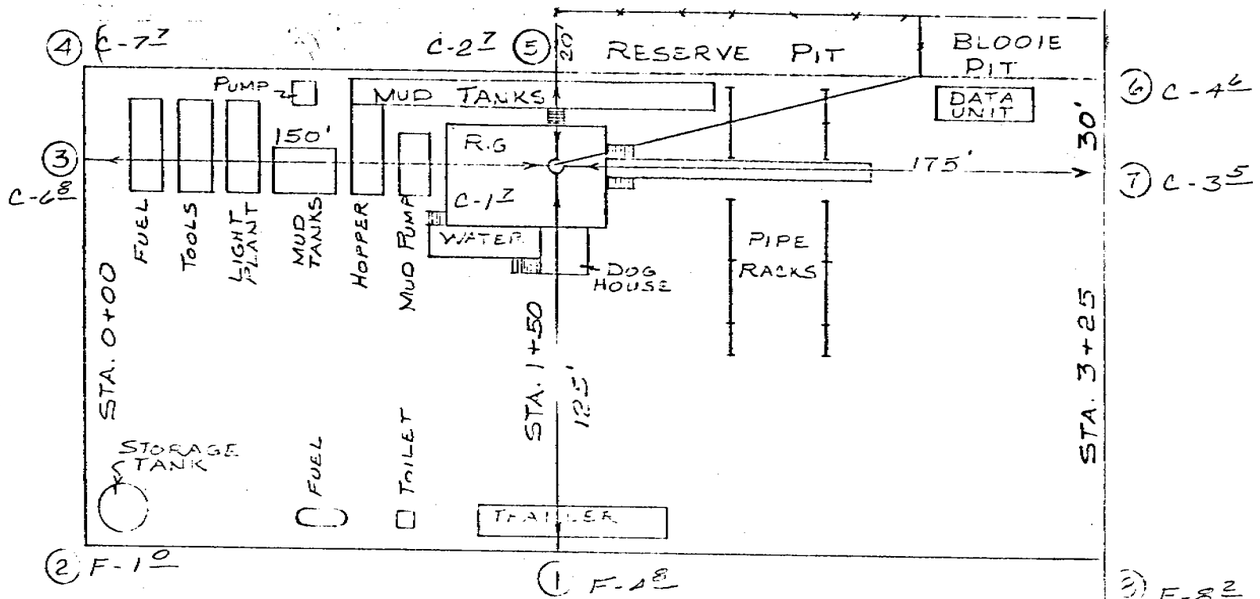
Enclosure

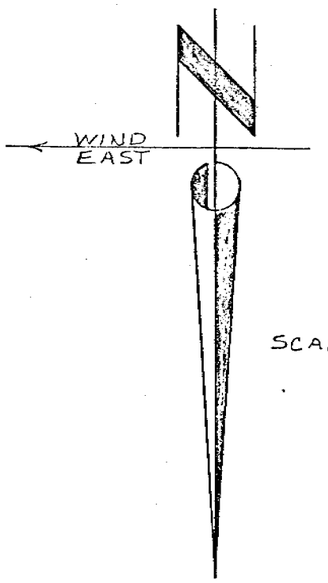
bcc: Branch of Mineral Leasing Adjudication U-923 w/enclosure
District Manager - Moab w/enclosure
DOGM
File - UTU73963
MMS - Data Management Division
Agr. Sec. Chron.
Fluid Chron.

UT922:TATHOMPSON:tt:03-07-95

TEXAS OIL & GAS
GRYNBERG FED. #1
LOCATION LAYOUT & CUT SHEET

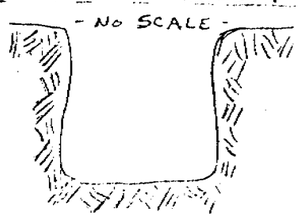






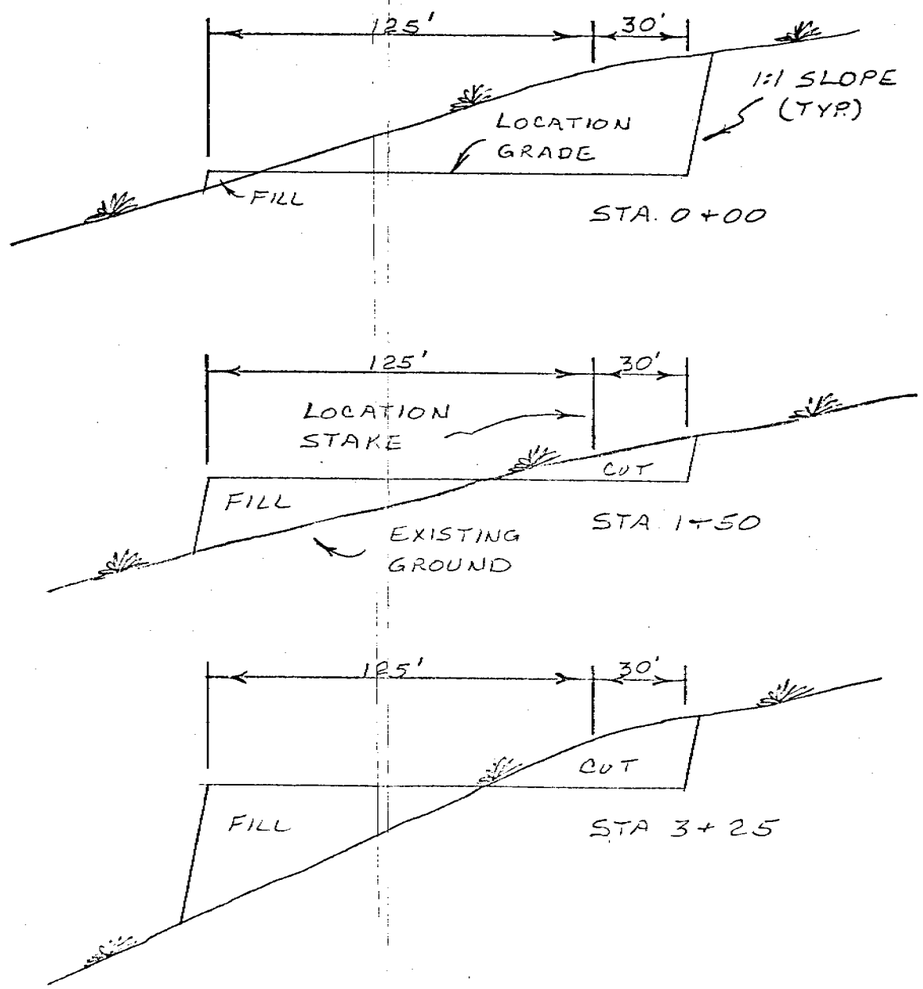
SCALE 1" = 50'

SOILS LITHOLOGY
- NO SCALE -



CROSS SECTIONS

Exhibit 7
Cut & Fill Sheet



SCALES
1" = 50'

APPROX YARDAGES

CUT - 2,726 CU. YDS.
FILL - 2,745 CU. YDS.